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# STUDIES IN THE PHILOSOPHY OF CREATION





**STUDIES  
IN THE PHILOSOPHY  
OF CREATION**

**WITH ESPECIAL REFERENCE TO  
BERGSON AND WHITEHEAD**

**BY**

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## FOREWORD

**P**ART TWO of this work comprises a revision of the author's doctoral dissertation, *Bergson's Idea of Creation*, presented to the Faculty of Princeton University in May 1930.

To Professor Warner Fite and to Professor Morris W. Croll, both of Princeton University, I am indebted for the introduction to the idea of creation and of creative intuition which their lectures afforded me. I wish it were in my power to present this important concept with the direct, lucid simplicity of which these men are masters. To Professor George T. Whitney of Princeton I owe a debt of gratitude for his patient and acute criticism of my treatment of Bergson's philosophy, also to Professor Norman Kemp-Smith of Edinburgh University for his generous comment upon certain special topics. I cannot complete this list without expressing my gratitude to four of my teachers discussion with whom has moulded my thoughts upon so many matters, Professor R. B. C. Johnson, Professor Edward G. Spaulding, and Professor Theodore M. Greene of Princeton University and Professor Charles W. Hendel of McGill University.

For the errors, ambiguities, and misinterpretations which this volume may contain I am alone responsible.

N.P.S.

South Orange, New Jersey.  
September, 1934.

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YAB S. LAR JUNG BAH

## PREFACE—THE IDEA OF CREATION

**T**HAT the past hundred years have revolutionized much of our culture and our science goes nowadays without saying. The theories of organic evolution, of the subatomic structure of matter and of the nature of gravitation and space, to say nothing of the work done in psychology and elsewhere, have quite transformed our map of knowledge. We may occasionally hear it said that philosophy has not advanced during this period and that it has not kept pace of the growth of our culture. We need not argue this point here: we answer only by turning to the subject of our essay. This is the study of a new idea which has pretty well transformed the structure of modern thought and now occupies a central position in the writings of the most outstanding thinkers. Although the origins of this idea lie well in the past in the works of Emmanuel Kant and in some of the utterances of the romantic poets, it is only among contemporary thinkers that it has found full expression.

Such conservative development is peculiar to philosophy. The student of the subject will soon learn that speculation is an agile thing and often very prolific. But when he has become critically minded, he discovers that philosophy is rarely original. The history of ideas often seems to the trained student little more than restatement of old thoughts in which the emphasis is constantly shifted from one distinction to another to fit the cultural needs of different epochs. A genuinely new idea whose novelty is deep-rooted and undeniable is always amazingly rare. Thus even the most opposed schools have more in common than is usually admitted. This is evident once a really new idea appears. The schools either ignore it completely for want of understanding or unite against it in wondering indignation. Perhaps, if the idea withhold their onslaught, the opposed thinkers will adopt something of its structure, but even so they often pass quite over its essential contribution, damning what they cannot understand with a faint-hearted agreement.

Thus the emergence of a new idea in philosophy is a slow and a precarious process. To desert old ways of thinking about art or about morals is not easy, but to embrace a new notion in metaphysics requires the most uncomfortable transformation that a keen mind may undergo. The philosophy of creation has accomplished such a transformation in the minds of many contemporary thinkers. Those of us who have ever come, if

only in a most amateur fashion, face to face with the notions underlying Einstein's theory of space and matter will realize what such an experience may be like, even if they have not succeeded in feeling at home with the new theory. That space, of all things, should be "warped" and of various curvature, depending upon the concentration of the matter extending within it, is really a painful notion to one who has thought at all in Euclidean terms. Such an idea seems indeed "to tease us out of thought," to hold us fascinated by its promise of a new world and at the same time to torture our minds with its apparent perversity.

Now, the idea of creation is not so difficult to grasp as the background of the theory of relativity. This is because we may use less bizarre and unusual examples in expounding it. But none the less its appearance in modern philosophy has often aroused a tantalizing confusion in the minds of thinkers, many of whom have been attracted by the possibilities which the concept holds for speculation but, along with their contemporaries, bewildered and even scandalized by the intellectual invitation which it contains. This is an invitation to deny doctrines which have for centuries seemed axiomatic, the very cornerstones of philosophy and common sense. For the philosophy of creation suggests that many things which philosophers once chose to consider as enduring and established are really plastic and even in the making. Philosophy had long looked to the figures of geometry as patterns from which to draw theories concerning the relation of the *order* of nature to the *things* of nature. Philosophers had frequently supposed that once the idiosyncracies of reality were grasped, all things and all events would seem to follow one upon another somewhat as the constant sum of the angles of a triangle follows upon the subsisting fact of triangularity. With the appearance of the philosophy of creation, this attitude begins to disappear and the order of nature is no more interpreted as something so dominant in the life of things. We no longer think that the events of nature follow from their antecedents with the same absolute necessity with which the properties of a circle follow from its definition. And if there is a god responsible for the existence and the growth of natural objects, he does not guide their course of being according to an immanent and complete plan. He does not see all times and all places following from his own nature or from the nature of the universe. Rather, as Bergson has it, creation must fashion its path as it advances; and so must a creative god.

Consider the structure of a poem. We find the whole is pervaded by a metrical pattern in terms of which stressed and unstressed syllables may be related on to another in serial order. Further we find in the poem

a rhyme scheme through which we may predict the sound with which certain lines will terminate. We may proceed then to study the grammatical structure of the sentences and find again a scene of intricate order whose forms are repeated elsewhere and which may be studied and classified at great length. *The poem is a center, a meeting place, so to speak, of several types of orderly patterns.* And still we cannot explain the poem's origin, its creation, by reference to these patterns. While the poem was in composition, these patterns of order were not woven together into the poem's structure, nor did the author know just how they were to be reconciled until he had written the poem. The poem was *created*, not drawn together in accordance with a complete plan. The poet had no archetype which he could copy. True, he wrote concerning some subject; but the beauty of his mistress or the glory of the hillside did not supply the words which were to describe them nor dictate the metrical sinuosities of the verse. The poet has only his own notion of what he wants to express, and his mind teems with his material. The words of his language with their manifold connotations, the metrical technique of his masters and those vague things, the style, mannerisms, or methods with which he is sympathetic—from these must be fused together into actual artistic structure the work which is in project. Thus the poet chooses the forms that are to be embodied in his verse. Composition is the fusion of these forms into the concrete product. This fusion, we shall find, has a set of laws all its own and presents for consideration a new metaphysic. For the growth of the poem does not obey a determinate scheme as does, for instance, the growth of the graphic representation of a formula. The poem is a selective coming together of various patterns, not obedience to one pattern alone.

It has been in terms of such a notion that certain recent thinkers, most notably Bergson and Whitehead, would interpret the process of nature. If we consider nature fashioning her creatures in such a way, making new life out of old materials, pursuing always a new course which is not a mere continuation of a plan already established, then we are creative evolutionists. The future appears, then, in its concrete structure free and unpredictable. Nature is free as an artist is free when he envisages a fresh creation and escapes from the treadmill of mere imitation and repetition. But here we find our theory is difficult to contemplate. Are we to believe that the exquisite precision which our sciences seem to reveal in nature, the ever-present articulation and ramification of structure, is in origin not a matter of orderly development according to uniform law, but a hit or miss affair in which much of the future is left to



unpredictable growth or even chance uprising? The idea seemed at first unbelievable, and as it now appears more and more applicable to nature, the mind often staggers under the conception, although perhaps finally mastering it after discarding certain incompatible prejudices or preconceptions.

For the philosophy of creation, reality is concentrated in the present. This is because time "has been taken seriously" as the active substance of the concrete. In a sense, both the past and the future are non-being. The past is concrete non-being, completely definite in detail, the object of history. The future is lacking in concrete actuality, being, insofar as it "is" at all, a set of possibilities awaiting embodiment.

Real time is the way in which future becomes past, the way in which open possibility attains concretion. To enjoy reality—to be actual—is to take definite form in the passage from possibility to concretion. This movement of embodiment is creation. That which has not been produced as the culmination of a passage of creation is not actual. Actuality holds patterns that once were mere possibilities in a close knit "togetherness," whose elements are in the closest form of reciprocal relation. As contrasted with this, possibilities are isolated, having "abrupt" boundaries. Thus when I say, "I may travel rapidly," I leave an abrupt limit to the picture. *How* I shall travel, in what vehicle, etc., remains unanswered and need not be answered to preserve a reasonable integrity of thought. However, if I say, "I am travelling rapidly," the question "*how* are you travelling?" becomes absolutely pertinent, for I must admit that I am travelling in some definite way and that my motion depends upon definite conditions, which will change when I cease to move. On the other hand, when I spoke only of the possibility of travel, no one of these conditions was necessarily involved. Creation is the passage of loose-knit abstraction into close-knit actuality.

Now, reality concentrates as present creation, set within an environment of past and future. Creation adds to the past, as it produces something which fits into the unfinished pattern to be found there. Creation reorients the future as it contributes a new actuality which offers or denies opportunity for embodiment to awaiting possibilities. Thus creation holds possibility and actuality in an ever-shifting contact. This contact or intersection of past actuality and future possibility is the reality of both of them.

Despite what is rather widely supposed to be the case, such process is not a leap in the total dark, or a sudden flash of divine inspiration. To be sure we shall find that there is contingency deeply rooted in all creation,

but even so creation does not lie beyond the pale of explanation. Some thinkers of great prestige have attempted to describe creation as thus fundamentally closed to rational penetration and explanation. We shall find that much confusion has resulted from this unfortunate phase of the new philosophy. In fact, the nature of creation lies near at hand and is easily contemplated.

If the reader wishes to perform a philosophical experiment of his own, let him reflect upon his powers of conversation. This should serve as well as an example of artistic production, for, as Croce says, any form of expression is a form of art. Consider then our ordinary verbal self-expression. Its process may, if we follow in Aristotle's footsteps, be analyzed into four phases or "moments"; Aristotle would have said "causes." First, there is the medium of expression, the language which we speak, the material out of which we fashion our statements. This is, however, not limited to vocabulary; there are as well grammatical structures and the conventional forms of expression or idiom which every language possesses. There is further, to correspond with Aristotle's final cause, the idea to be expressed, the theme of our discussion, for the sake of which we undertake discourse. It is a platitude that communication or expression clarifies our thought and even actually develops it. Through discourse our ideas pass from a vague sort of generalization isolated from relevant considerations into a coherent and complete structure of their own.

But this does not exhaust our analysis. There is another phase to describe, a subtler point not easy to make manifest. This is Aristotle's formal cause, and it refers to plan of organization. It is the way in which we handle the material for the sake of the meaning. It is such form which individualizes a writer's work. After all, innumerable authors employ the same medium and many write of one subject—it is form which sets them in contrast and makes criticism possible. The form is the work of art.

"Quin etiam possim nostris in versibus ipsis  
multa elementa vides multis communia verbis,  
cum tamen inter se versus ac verba necessest  
confitari et re et sonitu distare sonanti.  
Tantum elementa queunt permutatis ordine solo."

(Lucretius, *De rerum natura*, I, 823 ff).<sup>1</sup>

<sup>1</sup> Nay, thou beholdest in our verses here

To complete our analysis of expression we must mention the efficient cause—the source of energy which keeps expression active. This is the will, the power of directed attention turned upon our subject matter, the power which promotes expression; or more precisely makes expression possible, for this is not wholly a voluntary matter.

We shall maintain, following the arguments of our masters, that world-process, and in particular organic evolution, proceeds after the manner of esthetic composition and that the first principles of artistic creation are the first principles of all change. We shall trace this idea from its historical origin, where its vital connection with the central problems of modern philosophy is manifest, to the works of Bergson, Whitehead, and their contemporaries. We shall also attempt to show that in the fruition of this concept modern philosophy has achieved a breadth of application and a catholicity of contact with human interests that has been heretofore impossible.

Elements many, common to many words,  
Albeit thou must confess each verse, each word  
From one another differs both in sense  
And ring of sound—so much the elements  
Can bring about by change of order alone.

(Leonard)

We must emphasize order much more heavily than does the ancient atomist. Order or form, as he admits, quite transcends the elements ordered.

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NAWAB SALOR JUNG BAHADUR



**PART ONE**  
**THE PROBLEM AND THE BACKGROUND**  
**OF**  
**THE PHILOSOPHY OF CREATION**



## CHAPTER I

### PHILOSOPHIES: REASONABLE AND UNREASONABLE

**W**E OFTEN hear that philosophy is opposed on the one hand to science and on the other to common sense. Neither of these beliefs is strictly true. In a way philosophy is opposed to both common sense and to science. For there is a real difference between them. But though they differ in many ways they do not stand altogether aloof nor do they fail mutually to influence one another.

Philosophy differs from common sense and from science, but it is opposed to them as a father might be intellectually opposed to his industrious and capable offspring whose education he feared has been prematurely arrested. For philosophy is the father of both common sense and of science and is often very much concerned with their enlightenment. They, in turn, are apt to find him none too efficient a parent who is frequently helpless before their coarser and more vehement argument, and who cannot himself answer all the sly questions which he loves to put to them. Even so, philosophy learns much from the sciences, finding that ideas which have a philosophical origin, such as the idea of natural necessity, are enriched and strengthened through scientific employment and are thus made more significant for speculation, although philosophy can never lend itself wholly to the scientific point of view.

That both common sense and science spring from philosophy, are in fact in their early stages nothing but philosophy, seems quite obvious to the student of the history of thought. For philosophy has at times given a first hearing to ideas which afterwards have been made the foundation of various sciences. The very idea of investigation of nature and classification of her forms and ways of behavior was itself a philosophical suggestion. And we shall see presently the modern idea of studying nature as a system of mechanical motion was introduced by Galileo and Descartes, both of whom treated the idea as a philosophical subject. It is owing to these doctrinaire discussions that Sir Isaac Newton turned his attention as he did toward the behavior of masses in motion and gave us the foundations of modern physical science and astronomy.



So does philosophy contribute to common sense but in a less obvious way which we will make as clear as we can when we describe philosophical procedure.

All thinking is dominated by notions. A notion<sup>1</sup> is a perspective of reality, but a perspective seen at first glance. Hence a notion does not involve a reasoned account of a given subject. It is almost prelogical and philosophically speaking primitive, although, to be sure, the man who is conscious of the notions which are active in his thought has attained a considerable degree of enlightened sophistication.

Notions are primitive philosophy. But there is in all philosophy, even in the subtlest and the most closely reasoned, a primitive prelogical force which dominates the thinker and directs his intellectual energy. Notions are the drives behind all reflective thought. They are generative ideas. Without them philosophy is but a sorry thing, a sort of disembodied chess problem which because of the less determinate nature of the possible "moves" involved is by no means so satisfying a recreation as chess itself and far inferior to mathematics. Once, however, the thinker is captured by some notion which permeates his meditation and seems to him vitally important, philosophy is enlivened. The thinker has then a persistent problem before him; he must reconcile his notion with the reality which he perceives, and all learning and culture become significant awaiting as they do inclusion in the new philosophy which the notion has originated. Thus the problems of philosophy are real problems only insofar as their solution tends to influence the status of the important notions which the philosopher must ever bear in mind.

Thus if we are to experience the growth of a new idea as something new, we must put ourselves in the position of the thinkers who first encountered it and try, if we can, to feel the actual forces which drove their minds in conflicting directions. We must, so to speak, feel the strain of their perplexity, and even the emotional atmosphere which surrounded their work. In short, we must recognize the notions to which these thinkers pledged allegiance and we must capture something of the enthusiasm which supported these thinkers in such painful straits and made them ever expectant of a richer and fresher comprehension of a world which often seemed sadly at odds with itself and even thoroughly unreasonable.

<sup>1</sup> This use of the word is the author's innovation; it has in its favor the common use of the term, which signifies something rather more vague than a concept, still possessing a conceptual breadth of application.

When one of these notions appears "self-evident" or "obvious" to a considerable number of people, we find a new contribution to common sense. It is important to remember that these notions often seem outlandish at first and are saved from oblivion only by the perverse devotion of the philosopher. The latter is subject to the domination of the notion which hovers over his mind as a "presence that will not be put by."

But we can proceed no further without examples. Consider the philosophies of Plato and of Aristotle. Anyone acquainted with their writings will recognize a marked difference in attitude between the two thinkers—a different outlook, an allegiance to different notions. This is obvious when we consider the conceptions of God in which their respective philosophies culminated. Plato's aloof moral enthusiasm, nowadays called puritan in some quarters, is to be contrasted with Aristotle's sophisticated enjoyment of scholarship and inquiry. The puritan and the student of nature owed allegiance to different notions; they held different preliminary attitudes. And these cast a shadow upon their remotest metaphysics. Thus Plato thought of God as a power which strives to make the world as perfect as possible, i.e. to fashion it after his own image. As Plato puts it in the *Timaeus*, God "was good, and the good can never have any jealousy of anything. And being free from jealousy, he desired that all things should be as like himself as they could be."<sup>2</sup> Aristotle, on the other hand, tended to remove God from the world, to describe him as a mind which contemplates perfection, a perfection which he has himself always possessed, while the world must ever strive to imitate it. As Professor Taylor interprets, Plato's God is the shepherd of the sheep, but Aristotle's God embodies only the scholar's notion of perfection. In neither case are these primary standards of value made matters of argument, although they may be seen standing behind the arguments through which the philosophers arrive at their conceptions of deity. Thus the notions are not philosophical doctrines, although they determine the direction which a philosophy will follow and are often the sources of the enthusiasm which a philosopher feels for his work.

It is interesting to notice parenthetically that Plato's attitude toward theology was part of a campaign carried on by the Greek philosophers against the religious common sense of their fellow countrymen. The notion that the God or Gods who control the destinies of things should be beyond human caprice and human passion was not at first at all clear to the Greeks. As time went on the philosophers came to regard this

<sup>2</sup> *Timaeus*, 29 (Jowett's translation).

notion as of the greatest import and turned the full force of their sarcasm, ridicule, and logic against the old religion. In time they were, after a fashion, victorious: the dignified theology of the Stoics gained considerable popular support. A new religious common sense was established, which in many cases afforded an introduction to the Christian teaching which followed it.

A further comparison of the philosophy of Plato and of Aristotle will show us another example of the importance of notional background. Everyone knows that Plato taught the existence of forms or patterns which are imitated again and again throughout nature in animals, plants, and inanimate things. Man exists as surely as do individual men and is as real. The triangle is as real or more real than the triangles which we draw in the sand or those which we employ when we measure land. This is a first principle of Platonism. Now, it is characteristic of Aristotle's philosophy to deny the independent existence of these forms. The pattern Man exists only in men, triangle only in diagrams and in actual shapes of various bodies, or in the mind of the scientist. Now, much logic has been employed to defend these opposed doctrines. But the student of the development of philosophy will do well to examine the background of these arguments as well as their logical development. Plato was an ardent mathematician and, what is more significant to students of his philosophy, he saw things from the mathematical point of view. From the point of view of mathematical demonstration the instances or "figures" of the circle, the triangle or the polyhedron which we may keep before us while we are proving a theorem are in themselves relatively unimportant. They are always imperfect, owing to the fact that they are always produced in a medium. As Plato says, we use them only to suggest to ourselves the true mathematical relation which the figures reflect inadequately. The mind overleaps the barriers which such figures present. It seems able to define the perfect triangle even if none such exist in nature. Aristotle, although interested in mathematics, was also, what Plato was not, an enthusiastic naturalist, an observer of animals and of plants. Such empirical thinking does not employ the diagram. This is replaced by the specimen which must be apprehended from another point of view. It is not employed as a means of suggestion or an aid to attention as is the diagram. On the contrary we *search* the specimen for the facts which we wish to collect concerning the animal in question. We cannot define the organs of a cat and deduce their properties. The specimen does more than supply us with an aid to reflection concerning cat-hood. *The specimen seems to contain the truth about cats.* Hence the point of view of

the naturalist is not that of the mathematician, and he will not as a rule be sympathetic to the mathematician's philosophy. This is because his mind is dominated by the *notion* of the empirical object, the specimen.

That such notions pass over into common sense there can be no denying. Take for instance the great emphasis upon "facts" which the modern common sense insists shall color all inquiry and discussion. This has its origin in a philosophy which was even more absorbed in the notion of the specimen than was Aristotle's—the empirical philosophy of the seventeenth century. This is one of philosophy's valuable contributions to common sense, which was freed from a grovelling reverence for an authority and dogma which had enjoyed too great an influence in the Middle Ages.

There are, I suppose, as many notions as there are fundamental types of human interest. Natural science unearths the notion of uniformity of natural process and philosophy is apt to interpret this as inimical to the notions discovered by the man who reflects upon his ethical experience: the notion of the spontaneous moral agent. The study of logic, apart from science in general, supplies a further notion which we shall have to examine later, the notion of logical stability. The various points of view in religion probably spring from accepted notions as also the many attitudes in literary criticism. We have not, however, a large number of notions. The number of reasonable points of view is not large, and the amount of substantial agreement in philosophical discussion is easily underestimated.

Now, with reference to our interpretation of philosophy we may put this question: If allegiance to some notion or perhaps to several notions is the driving power behind philosophical systems, what are we to say of the systems themselves? Are they in any way reflections of the structure of things or are they merely products of human ingenuity, which have their rather arbitrary origin in the notions to which their author has perhaps unconsciously pledged allegiance? After all, is there any reason why the interests of one philosopher should be more significant than those of another, so that we should find in certain notions a genuine perspective of reality and deny this importance to other notions? We may find it difficult to say that there is any such criterion. It is certainly not characteristic of the modern temper to make such a choice between notions. One slant is as good as another! After all, let an ingenious thinker begin with a set of principles suggested to him as he defends his favorite notion and he may reasonably be expected to frame a clever deduction of the other philosophical concepts or at least of some-

thing like them, from his own first principles. Such an intellectual achievement is known in philosophy as system-building. To say dogmatically that any given philosophical concept can never be employed as a first principle, if at some time a philosopher should happen to be so minded, would be a very bold assertion, one hardly in keeping with a broad understanding of the history of philosophy. One idea, then, seems as good as another, and we may attach no "honorific" importance to one idea and deny it to the next.

Still, the espousal of a single notion is characteristic of much philosophy and is indeed the motive behind many systems. Once a philosopher is caught by the appeal which a notion can exercise on human thinking every doctrine opposed to it seems, if not irrational, certainly unreasonable. This is why some thinkers who lack the tolerant graciousness of the well informed scholar are so given to violent polemics and at times attempt to ridicule their opponents.

Shall we then admit that this procedure has been unfortunate and that in philosophy one idea is as good as another? This point of view is sometimes a healthy one. It reveals an intellectual robustness which may preserve its possessors from the cultural and moral inconveniences of fanaticism. But such an attitude may also be thoroughly dispiriting: it may deprive the thinker of enthusiasm of any sort—religious, moral, intellectual or esthetic. At times it deadens even the most individualist self-assertion, although this is often the last sentiment to succumb. The reader has only to recall certain characters which Mr. Aldous Huxley has portrayed in his novels to realize the significance of such a point of view. The perfect intellectual "balance" which Mr. Huxley describes as so enervating is the very attitude in question.

All this, however, follows only if, when we admit that one notion is as good as another, we deny significance to all of them. The alternative is to admit that there may be more significant notions than most polemicists realize and to organize our speculation about such an initial hypothesis. To approach philosophy in this way is to consider it the reconciliation of notions and hence as the reconciliation of the warring factions of human culture. True philosophy is a weaving together of the notions which the ages of reflection upon human life have brought to mind. Successful philosophy does justice to the notions which the various human interests, so to speak, unearth.

Such philosophy begins like all inquiry with an act of faith which asserts that human interests and the ideas which they generate are all, so to speak, avenues which lead toward philosophical truth. When we real-

ize how all philosophies have grown from notions into systematic concepts, we realize that we *must* admit that the notions are expressions of reality which demand harmonious blending—i.e. we must, if we wish to consider philosophy at all significant. Our philosophy must proceed on this assumption and must justify it. This it can do only by erecting a consistent, balanced structure of concepts based upon the important human notions, and doing justice to them. That it is possible to do this without ignoring any one of the notions prominent in the history of thought indicates the possibility of our original point of view: that notions are avenues leading to an understanding of the real, that they do, so to speak, converge upon truth. We cannot establish as dogmatic that such a philosophy is the only conceivable philosophy. But we can make clear that our philosophy consciously employs a procedure which most schools of thought have used tacitly and without reflection: That we have at least arrived openly at the genuine philosophical method which others have used *sub rosa*. But this gives us no grounds for logical assurance of the first order. Philosophy then must be said to offer *reasonable suggestions* rather than *undeniable truths*. But reflect: How can we wisely desire more? Consider the history of philosophical certainty. What a bog of contrarities! Scarcely do we attain one conclusion when we flounder upon its opposite and are again deep in confusion, or in what the profession euphemistically describes as “difficulties.” The history of philosophy is a map of such difficulties which the adherents of a favored notion delight in discovering in the vicinity of their opponents. This is the result of allowing a philosophy to limit itself to a single notion and then to teach the absolute certainty of its derived concepts.

The contemporary attitude is opposed to such procedure.<sup>8</sup> And we urge that the account of philosophy which we have given above is in keeping with the modern approach to thinking and speculation. Such an interpretation of philosophy has two points in its favor:

1) It does not claim that philosophy is more than its history shows it to be. It identifies itself with no hypostatic photography, but admits that philosophy springs from the earth and is of the earth.

2) However, this interpretation of philosophy does more than admit the study's humble origin. It shows how philosophy may “live up to what it really is” and be the reconciliation of notions. Philosophy has always sprung from notions, it must always do so. The new philosophy is aware of this and forces itself to be consistent and to consider all notions,

<sup>8</sup> See A. N. Whitehead, *Process and Reality*, Introduction, for an excellent account of the more modern conception of the function of philosophy.

impartially. The new interpretation also indicates the general assumption which philosophy must make: that reality is revealed through notions. Some thinkers, intoxicated by the study or the admiration of exact natural science, may scorn to devote their energies to the formulation of "reasonable suggestions." This, of course, is a matter of temperament and very likely allows small room for argument. However, this disagreement engenders controversy when the opposition advances the startling argument that hypotheses, philosophical or otherwise, lying beyond the reach of factual verification, are meaningless. Meaning is defined as an idea's "verifiability." Without reference to possible verification by observation, ideas are empty and trivial. Here we find an unbalanced philosophy, dominated by the favored notion of empiricism, to the exclusion of all other aspects of life and experience.

But so to classify an opponent's thought will not silence his attacks. If we are to free ourselves from the assaults of the positivists, we must contrive to meet them on their own ground. This it is not difficult to do. Their entire argument crumbles before the vital question: "How comes it that your own doctrine possesses meaning?" Certainly it is supported by no verification similar to that employed in natural science. It is an hypothesis which no observation or experiment can substantiate. It is, in short, a philosophical hypothesis. But the positivist has turned his back upon real philosophy when he identified all logical significance with scientific method. Hence his own theory is self-refuting, condemning itself to meaninglessness. We need fear nothing from a navy whose ships do not float.

The ideal of impartiality essential to genuine philosophical method brings us explicitly to an important distinction—the distinction between a rational and a reasonable philosophy. At the risk of some repetition, let us make this distinction as clear as possible. Even if he accepts no such interpretation of the philosophical activity as we have here presented, the student of the history of philosophy who succeeds in preserving a genuine intellectual curiosity is often embarrassed by the multiplicity of metaphysical possibilities which lie before him, and the question arises inevitably: If so many philosophies are possible, what constitutes a good or a successful philosophy? After all, much of the texture of a system seems to depend upon implicit assumptions made at first almost unconsciously; and strangely when these assumptions are brought to light and consciously surveyed one often seems as likely as

another. They seem to be like the emotional blockades of the Freudian psychology that often lose their power once they are clearly recognized.

Systems of philosophies are really the reconciliation of accepted postulates. If the postulates are absurd, or at least indifferent to truth or falsehood, the systems themselves can claim no further objectivity. In this essay we have attempted to avoid this predicament and to maintain a sort of objectivity for our conclusions in a manner not unlike that which William James once employed with such ability. We have distinguished between "rational" and "reasonable" philosophies. A rational philosophy is one that is consistent with its postulates, which refer to many realms of human experience. To construct a rational philosophy is in itself a brilliant achievement. But this is the case only because of the difficulty of the task and not because of any value intrinsic to the product. A reasonable philosophy is harder to define. We may say that a philosophy is reasonable when it "saves the appearances" of the several human interests. The idea of saving appearances is frequently encountered in philosophy but usually in a purely intellectual significance. The appearances are saved when they are made consistent with ultimate postulates. We may describe appearances as accepted beliefs such as "For man real decision or real choice is possible." However, a reasonable philosophy need not save every appearance which it finds in human history. By no means: in fact a very few appearances are found worthy of such treatment. These are the appearances which guarantee the significance of the fundamental phases of interest and activity through which men express themselves.

Hume's philosophy is accordingly unreasonable, not because of any profound inconsistency or error in its development, rather because it makes science "impossible" by interpreting prediction of the future, upon which science bases so many of its hypotheses, as revealing nothing in any way fundamental. Hence according to Hume there is no real reason for believing that scientific hypotheses are at all true of the nature of things. Such a doctrine is quite unreasonable because it thwarts a permanent human interest, that of curiosity concerning nature's behavior.

It is important to notice that this refutation of Hume has been frequently employed by thinkers who have had no intention of making an explicit distinction between a rational and a reasonable philosophy. Also the famous refutation of solipsism that, although perhaps irrefutable, it belongs in a madhouse touches implicitly upon this distinction.

Here follows a list of notions which seem fundamental to the author. These notions are all of them presupposed by characteristically human



activity. In confining the list to so small a number we are endeavoring to recognize only those notions which are inseparable from human activity. We are trying to avoid the *idées fixes* of the philosophical crank. There is no clear criterion for doing this; we must rely upon the testimony of the history of philosophy and its recurring problems. These notions we find at the core of the great problems. 1) The first we shall call the notion of logical stability. This notion shines clearly through much of Plato's writing. It comprises a firm belief that there are in the metaphysical situation objects, not necessarily concrete objects, which do not change, so that there may be something in the world corresponding to our intellectual ideas. There can be no moment of actuality to which these objects are not relevant. Deny this, and we close the world to our minds, for we assert that the structures of our intellectual labor cannot reveal the world. Discourse and reality are then incommensurable. Concepts can only distort their objects. Most unfortunately the philosophy of creation has occasionally involved denial of this notion and discredited discursive thinking. 2) The concrete world contains an especial mode of orderliness. It appears, when understood, to be a dependable system of processes, so that "To obey nature is to control her." In nature nothing happens that has not roots in the past. Process is not catastrophic, its sinuosities may be seen as elements in an ordered series.

This notion really includes the worship of "fact," so thoroughly ingrained in our modern common sense. If natural processes are regular in the way that we have described, then they may be studied by observation and experiment. Nature is not capricious and hence her habits may be learned through careful examination of distinct moments of her life. Nature's constancy makes these moments significant, and hence the vast importance of fact.

3) Man may through acts of will contribute to history: man is responsible for what he does. By this we mean that a man can answer challenges and give reasons to justify the action which he wills, and that these reasons which he may indicate are, if he is thinking carefully and sincerely both at the time of acting and again at the time of answering for his actions, the real and final grounds from which to explain that man's action. This notion asserts the freedom of the will.

4) A fourth notion, less prominent in speculation, stands behind practical activity, as the third behind moral and intellectual. It is very briefly that life is worth living. For this notion little systematic defense can be given, as is shown by the dreary dispute between the optimists and pessimists of the last century. However, in defending the notion of

human freedom I think that we shall be defending this one, too. 5) The fifth has to do with beauty. It is the assertion that beauty is something real. *De gustibus non est disputandum* cannot be finally true, for it presents the artist and the critic with the same painful and unsatisfying interpretation of their work that Hume presents to the scientist or the pragmatist to the mathematician.

People intimately acquainted with the purely spontaneous phase of worship and religious experience might well be able to suggest another notion of importance. The author is himself incapable of making such a contribution.

It is our belief that a reasonable philosophy must present a reconciliation of notions, defending them from one another.

## CHAPTER II

### THE SIGNIFICANCE OF THE PHILOSOPHY OF CREATION

**M**UCH philosophy of the old type, which claimed to be in some way especially appointed by reality as ambassador of the self-evident, actually had the good sense to attempt reconciliation of notions, although this was presented under the guise of sun-clear deductions and undeniable first principles. Thus modern philosophy has really been a long struggle between two notions, both of which have become firmly entrenched in opposite aspects of our culture. The struggle is first clearly manifest in the philosophy of Descartes. Being a great philosopher and not merely a member of a school or advocate of some inherited doctrine, Descartes was sensitive to the importance of more than one notion. We find in Descartes two great ideas, the two ideas which have fought for supremacy throughout the course of modern philosophy. These are the notions of vital will and the notion of scientific order. Both of these hover over Descartes's thinking and guide him toward the conclusions which he reached. They are responsible for the texture of his system and for its weaknesses. For Descartes was a suggestive rather than a consistent thinker, one whose spirit would not be cabined by the requirements of absolutely harmonious thought, who unlike his follower Spinoza but like his English opponent, John Locke, saw more things in the world than he ever succeeded in accounting for.

Most conspicuous perhaps of all Descartes's doctrines are his bold statement of human freedom and his less dogmatic assertion that there are in the world two kinds of substances, thinking substance and extended or spatial substance. Both these assertions are founded upon the two prime notions of Cartesian thought, the notion of spontaneous will and the notion of scientific order—the spontaneity of the human being as opposed to the regularity of nature or the "external world." Both these notions are deeply rooted in Descartes's attitude and it is to these that his philosophy owes its great significance.

Descartes was desperately interested in physics, a science which was in his day in a chaotic but energetic state, needful of the discipline that was later supplied by the genius of Sir Isaac Newton. He belonged then to the period which culminated in the discovery of the first principles of

mechanics, a period when the radical thinkers were interested in seeing natural process analyzed into elements, such as mass, force, velocity, acceleration, etc., which might be interrelated as functions of one another, varying relatively to each other according to various laws or formulae, and thus revealing the ground pattern of a natural determinism. Hence Descartes was interested in a world whose operations are regular and law-abiding. He never determined satisfactorily what these laws are but he was convinced of their existence and their universal application. Now, if nature is to be conceived as thus regular and orderly in her physical process, it seemed obvious to the mathematical Descartes that we must consider this process as measurable. The entities in which this order is to be discovered must be measurable entities, such things as mass, force, velocity, acceleration, etc., must be subject to measurement if we are to recognize any thoroughly orderly relation or ratio between them. Further, it is obvious that there are many things in the world that are not measurable, at least not accurately so, as for instance desire, will, love and hate and the emotions and sentiments in general. But unfortunately for Descartes and his fellow thinkers the older medieval conception of nature had been, so to speak, saturated with ideas very similar to those just mentioned. Vitalist or biological ideas of an old school had overrun the realm of physics. For instance, it was taught that heavy bodies fall because they have within them a downward tendency just as a child has within him a manward tendency and, so to speak, "loves to become" a man even as an Aristotelian acorn "loves to become" an oak. In this scheme motion was not considered simply as change of place. It was rather change of condition or change of state or of quality. Thus when a body falls, it is not so much a change of place as a change of condition. This change is a passage of the "downward tendency" from potentiality to actuality, from possibility to active function. Just so, in a child the characters of manhood reside as potential, i.e. as a possible outcome which will be realized if natural function goes unthwarted. In such growth, it was thought that change of place, i.e. of position of one body as relative to other bodies, plays a minor rôle, even though it is involved in all development.

But Descartes was inspired by the thought that all matter, all physical bodies whether animate or inanimate might successfully be studied as units moving in space, and their relative positions plotted according to definite laws of motion. From this point of view, clear and distinct conclusions might be obtained concerning the structure of animate and inanimate bodies and useful knowledge, for instance in the fields of

medicine and mechanics, might be developed. Such inquiry requires analysis of compound bodies into their simple units and a study of the behavior of such units. All this has little to do with the tendencies or potentialities which the schoolmen of the Middle Ages had believed to be concealed somehow in animate and inanimate bodies. So Descartes wished to ignore everything but the spatial and the measurable in the study of the physical world; hence he wished to rule out of consideration all factors save those involved in change of place. He did not wish to be embarrassed by occult or concealed tendencies or forces which he could not handle in terms of such motion.

Following this lead, Descartes denied the importance of qualitative change. He taught that change of color or of temperature is really change of movement among the particles which compose the body in question. In this modern science has borne him out and strengthened his thesis that knowledge gained through the senses cannot stand by itself as final but must be explained by rational and often mathematical inquiry. This assumption of Descartes's made his world a much simpler and a more orderly one, but the assumption was, in his day, by no means a necessary nor an obvious one to make.

Also he fled from the notion of final cause. For if *man* is the final cause or "end" of a boy's growth, how can this be included in a spatial analysis of the boy's physiology? Descartes thought that study of this physiological pattern could fruitfully be carried on only with reference to the motion of the particles involved. Knowledge of these bodies and their behavior might be developed without reference to "where they were going." This, Descartes thought, was a much more adequate method. And in a sense he was right because laws of motion are more easily treated than laws of growth, because motion is more readily measurable than growth. Furthermore, from the developmental point of view, motion is not eternal but can be generated and destroyed, just as the vital processes of an animal can be destroyed in death. However, when we consider motion with Descartes as only a change of place it seems eternal, being, so to speak, transferred from one body to another, as for instance from one billiard ball to another, but eternally, exhaustion of motion being only apparent.

Now, with such an intellectual background it is not surprising that Descartes found dualism between mind and matter a significant one. He wished to distinguish very sharply between the realm of will and that of spatial motion. In fact his mind was dominated by the thought that such a distinction is quite unavoidable. There could be no doubt that will is

a "tendency" toward or away from different objects and situations. Further it is true that such activity cannot be measured as we measure, for instance, the speed of objects in motion or the force of such bodies. It is in this sense intangible. Hence Descartes's great eagerness to separate spatial matter from non-spatial thought with its primary characteristics of desire and will. From the older point of view, an absolute split of this sort was, as we have already seen, by no means obvious. But it became obvious to Descartes, i.e. it became philosophically obvious, which means only that Descartes was desperately anxious to believe in the truth of the doctrine.

Thus Descartes, faithful to the notion of scientific order, banished spontaneity and vital development from the physical world. He went so far as to say that animals are only machines, their bodies functioning reflexively quite without consciousness or will. He did not, however, so describe man. Man possesses a conscious will and a power of free choice although his body, like all animal bodies, is a part of natural process.

Here again in this exception of man from determinism, Descartes was dominated by a notion which seemed to him of great importance. He was inspired by the thought that the human will is absolute and master of its situation once it is given the opportunity to operate deliberately. A moment's reflection will show that such a notion has as sure a grip upon a philosophy like Descartes's as has the notion of a regular and measurable order of nature. Suppose we deny this freedom of the will and admit that the mind "obeys" the "motions" of the "fluids" in the brain—that our mind is like that of the animals without the power of will. What then of our opinions concerning the problems of philosophy and of science? Are they genuine opinions? Or are they part of a course of events which itself is but the regular unfolding of a natural process? If the latter alternative be the true one, how can we believe that our assertions have any logical value? If judgment is an event in the spatial world which proceeds without reference to values, how may we expect to find the value of sound reasoning respected or embodied in our thinking? Sound thinking is not a result of soulless order. Sound thinking has a goal which it endeavors to reach. It is always trying to express itself according to principles of logic with which it does not easily conform. Descartes felt sure that it presupposed a free will that could accept and reject ideas as they were weighed and judged. On this side, Descartes was wholly teleological. Reasoning is an *adaptive* activity. Man must adapt his thoughts to what he realizes are the norms of good thinking and valid investigation. This Descartes believed and he emphasized the

importance of an independent will as the activity which makes for such "adaptation," although of course he never used so modern a term.

Hence Descartes, true to his faith in human reasoning and to his interest in physical science, split the world into two types of being, volitional thought and spatial matter or extension. To the first he attributed the power of free decision and purposive development; to the second he denied these attributes without any qualification.

When we realize the implications of this step we find philosophy in a difficult predicament.

If body belongs to a system of non-vital process which is quite remote from the will and obeys its own laws exclusively, how do we mentally influence our own actions? Of what force is decision? It seems that we cannot escape the determinism which the existence of physical law seems to inflict upon all bodily motion. Further, how do decision and voluntary effort escape from the determinism which must reign in the brain and nervous system, if the Cartesian suppositions are correct? The precise steps by which Descartes essayed to prove these suppositions and to avoid the conflict between them have long since taken their place in that museum of interesting fallacies which occupies so much space in the history of philosophy, and of science. But the notions which inspired his thinking are in our day nearly as powerful as in his. And it has fallen to the philosophy of creation to weave them together into an harmonious pattern.

## 2

Now, conflict between necessity and freedom is much older than Descartes's philosophy. It was a central problem throughout most Christian theology and it appeared in Greek thought as well. The problem was of especial significance for Descartes because he was interested in what seemed a new type of order or necessity, that of bodily motion. Medieval thought had held to a determinism but most medieval thinkers had not supposed that God determined all things by means of plotting in advance, so to speak, the movements of bodies. For them God foresees or sees the whole of history but he does so in terms of the Aristotelian interpretation of the world. Change of place is not the sort of motion which underlies all natural events and renders them explicable. But even for the medieval schoolmen there arose a conflict between this order of things, which God created and knew in detail, and the spontaneous action of the individual creature. Descartes's interest in autonomous thinking for which an independent will seems necessary was hardly present among

the schoolmen. They were preoccupied with the dire consequences that a necessitarian doctrine has upon ethical and religious speculation. If freedom be denied to man, how are we to justify divine punishment or render moral notions at all significant? Let us consider the origin of the problem.

The notion of stable order arises with the beginnings of philosophy. It is the most enduring of concepts and its later interpretations have set the most serious problems of the several philosophical periods. We must consider the logic of the situation in order to appreciate the compulsion under which the thinkers labored who strove to weave stable order into the texture of a philosophical system.

All thinking implies a ground. This means very simply that if significant thought is to be possible, the things thought about must possess a definite nature which does not alter in structure. What is once true, must be always true. Reality cannot melt into new forms. If it does *change*, it must change according to a *modus operandi*, a "manner of go," which is itself permanent and, so to speak, dependable, in that it recurs in the same way and with the same conditions. Deny this and we face chaos. Such consideration brings us into the presence of a universal determinism not only in the physical realm but also in the mental, for mind, too, seems to be an object of knowledge. What is knowable must be stable and can admit of no non-orderly change. Lack of order is disorder, and real disorder is unknowable.

From such considerations we may very easily pass to the doctrine that there is no real or logical change, nothing really becomes other than it was, all passage is drenched with permanence. The course of nature only *seems* arbitrary and contingent. This is true even of nature's most sudden contortions. Behind everything lie the principles of things and these endure forever and necessitate the real. Being or ground or definite structure cannot change. For if it changes it must change either into being or non-being. Now, that definite structure or ground should resolve itself into non-being or contingency is impossible. This seems self-evident: from order we cannot derive chaos. Now, further, if being changes into being without becoming in any way contaminated with non-being or contingency, we have no real change at all; when we say that being so changes we are really taking a wider view of the first being in question, realizing that it is inseparable from certain further being as some diseases are inseparable from death. But here one being does not change into another: the two are parts of one and the same order. Hence being cannot change. Therefore there is one order of nature, the change-



less being, which is fixed and immutable. If we do not admit this, we have no right to talk of being at all and are faced with chaos.

Being, the order of which we speak, is the inspiration, a sort of first mover, of all inquiry. The faith which man puts in its existence makes of it at once the goal and the justification of all investigation. Granted the existence of this structure, we have the right to proceed with inquiry even when our material seems the most obstinate. The existence of such structure transforms the imperfections of our knowledge into ground for further advance. The present state of our knowledge, animated by the fact that things must conform to some definite structure, is always the life of inquiry. Faith in the reality of such structure is acceptance, perhaps too thoroughgoing acceptance, of the notion of logical stability, which seems to reflect for us the nucleus of both thought and being, aside from which no intellectual enterprise is significant. Logicians must accept this as the first datum of their science without which procedure is impossible. The presence of stable structure, the unmoved mover of science, is the irrational essence of rationality, irrational because it cannot be deduced or established by any proof, which does not, perforce, already take it for granted. Logical stability may be recognized and exhibited in various ways—contradiction, identity, sufficient reason, or in the principles of definition employed by Socrates—but any exhibition must itself assume and respect logical stability in its own mode of procedure.

The notion of logical stability need not drive us to the hard and fast monism above indicated. We need not accept an absolute "block universe" when we avoid the chaos of extreme irrationalism. In fact, absolutism is the result of the unreasonable dominance which the notion of logical stability so often acquires. How this predicament can be avoided, it is the task of the philosophy of creation to show. (See below, pp. 155ff.)

But it is not surprising that philosophers have usually considered thought most in its proper element when it contemplates being that survives the semi-confusion of ordinary experience. Such being seems to be the structure of things, or at any rate nearer to that structure than are the objects of this common experience. Such belief was prominent in Plato's thinking, and we find him at times paying the ground of our knowledge some very handsome compliments. Of the necessary existence of such a ground he was convinced.

"But if nothing is at rest, every answer upon every subject is equally right; you may say that a thing is or is not this; or, if you prefer, 'becomes,' we shall not then hamper them [our interlocutors] with

expressions of rest."

"Quite true."

"Yes, Theodorus, except in saying 'thus' and 'not thus.' But you ought not to use the word 'thus' for there is no motion in 'thus' and 'not thus.' I know of no word that will suit except perhaps 'no how,' which is perfectly indefinite."<sup>1</sup>

And he extolled the world of forms which supplied the stable and rational element in thought and being.

"And were we not saying long ago that the soul when using the body as instrument of perception . . . is then dragged by the body into the region of the changeable, and wanders and is confused; the world spins around her and she is like a drunkard, when she touches change?"

"Very true."

"But, when returning into herself, she reflects, then she passes into the other world, the regions of purity and eternity, and immortality and unchangeableness, which are her kindred, and with them she ever lives when she is by herself and not let or hindered; then she ceases from her erring ways, and being in communion with the unchanging is unchanging. And this state of the soul is called wisdom."

"That is very well and truly said, Socrates."<sup>2</sup>

Now, the relation of this more stable, or perhaps unchanging, realm to the flux of our experience is a vital problem. Besides the philosophy of Parmenides which denies the flux, there are two classic answers or types of answer.

The first view, the one to which the passages quoted above belong, considers being not only as present structure but as value forms which becoming or the author of becoming seeks to realize. The system is in harmony with a major interest of Platonic thought: the ethico-political view of man's duty in society which he performs but imperfectly. This is in marked contrast with the view perhaps more prevalent nowadays as the outcome of Descartes's philosophy, that ground is the reality which we perceive inadequately as a partially contingent world. Ground is not then considered as an ideal perfection but as the actual law-abiding reality whose structure can be studied with partial success in the modern sciences. On this view, the whole world is identified with structure. There is nothing that is not stable and determined as an unconscious natural order. The latter view we may call, following Bergson, the mechanist as opposed to the former or finalist view.

<sup>1</sup> *Theatetus*, 183 (Jowett's translation).

<sup>2</sup> *Phaedo*, 79 (Jowett's translation).

When Galileo brought dynamical science from heaven to earth along his inclined plane, as Bergson has it, he gave impetus to a movement which has strengthened the mechanist view immeasurably and made it seem to many wellnigh inevitable as it did to Descartes. Law, expressed in terms of mathematical formulae, was found then to be applicable to new realms of reality. And it became a natural assumption that everything in our experience contingent or not mathematically regular seems of this sort solely because we are ignorant of the true structure involved. If we could escape from our confused perception, if we could overcome the distortions of the real which our pragmatic senses impose upon us, we would see how orderly and law-abiding things really are. Thinkers followed this interpretation by discrediting all qualities of merely sensuous experience, preferring those amenable to mathematical treatment. This we have seen forced Descartes to split his world in two and to found science on the notions of spatial motion, which functions without reference to final cause. This view is really opposed to any reasonable interpretation of the world. Once it attains a measure of development, it is openly at war with any interpretation of life that would grant telic or conative interpretation to any intelligible process, biological or otherwise, so that those who wish to describe nature mechanistically and still hold a reasonable interpretation of life must seek another realm of being in some way underlying the mechanical in which other principles are dominant. Such was the Kantian attempt at reconciliation.

But neither is the finalist view itself very helpful in this respect. The early forms of finalism, such as that of Plato's *Timaeus* for example, do allow a cosmology of the sort desired. The Demiurge, the guide of becoming, striving to embody the ideal forms of being in the world of space belongs to a magnificent philosophy, although an incomplete account is offered to explain his creative activity. As this explanation was attempted insurmountable difficulties arose. Perhaps if Platonic philosophy had endured in its original form, we should not have had to face the problem with which modern philosophy has been engrossed. But the treatment of God's creative activity by later philosophers has introduced all the difficulties of determinism. Thinkers could not conceive of a God who did not plan and survey his creation in the most perfect way. Hence they described his knowledge of the world as in no way similar to our knowledge of becoming, i.e. knowledge of something partially indeterminate, contingent and unfinished. Rather he sees the whole world in its finished totality, all events being precisely drawn and understood. Thus, in a sense, he foresees what for us is not yet.

The important nucleus of this conception of finalist determinism is the well founded belief that change undominated by stable being is unknowable and chaotic or nonexistent, being without intelligible structure. Philosophers are then unwilling to admit this change even into a universe which is not necessarily mathematically ordered. The result is that they in effect deny all emergence of novelty or existence which cannot be seen along with all other existence as partaking in the stable principles of being which hold the world together.

These principles of being, secure as they are from the indetermination of observed becoming, are thought of as eternal and immutable, and the world which must relate to them is considered as final and "given" like the principles themselves. This interpretation of the actual world is, I think, forced upon many thinkers because they cannot conceive of any way to describe or explain becoming, becoming which is only intelligible thanks to enduring forms of being. Being seems everywhere to the student and hence he interprets his world solely in terms of it. And even if he describes the nature of things in finalist terms, he will apply to such a scheme properties derived from contemplation of being. The pattern or plan of the realization, or rather the realization itself of whatever values are involved, is considered to be as stably existent as are the principles underlying any process of becoming. Otherwise such realization seems a hit or miss affair, in no way suitable for the high position which it holds, as the essence of world process which manifests so much order, precision, and regularity. No leap in the dark can originate such structure. From the darkness there can come no light.

### 3

Now, if philosophy is really what we have described it to be, if its aim is to interpret the various phases of human experience and weave them together into a world theory which does justice alike to each phase, then philosophy should be heartily opposed to an out and out determinism. For any philosophy which ignores, as determinism must, a wealth of material to be derived from the moral experience, is hardly a balanced interpretation of life. Such a philosophy might be rational enough in that it deduced certain conclusions from its accepted starting-point without falling into fallacy. But it certainly would be unbalanced and unreasonable in that it took the liberty of denying primary consideration to certain important human interests.

William James in his essay "The Dilemma of Determinism"<sup>3</sup> has

<sup>3</sup> *The Will to Believe and Other Essays*, New York, 1897, pp. 145-83.

stoutly defended this thesis. There is a type of judgment which man is always making concerning his environment. This James calls the judgment of regret, and he shows that it cannot find a reasonable interpretation in a determinist account of the human situation. To realize that certain events have been weighted with misery or evil for our own lives or for the lives of our fellows is to express regret. There are many times when we cannot refrain from thinking, "The world would have been better without this." Such evaluation of events seems inseparable from the human attitude.

*"Sunt lacrimae rerum et mentem mortalia tangunt."*

But the determinist must realize that such defeat and failure are inseparably bound up with the whole of reality, that they are in no sense accidents but along with everything else part of a given scheme that is inexorable, quite unshaken by a human judgment made of its value. If we believe this we are faced with a dilemma, we must either direct our judgment of regret toward the scheme of things as a whole and call ourselves pessimists, or renounce such judgment altogether. After considering the details of a brutal murder, James concludes, "Regret for the murder must transform itself, if we are determinists and wise, into a larger regret. It is absurd to regret the murder alone, other things being what they are, it could not be different. What we should regret is the whole frame of things of which the murder is one member. I see no escape whatever from this pessimistic conclusion, if, being determinists, our judgment of regret is to be allowed to stand at all."<sup>4</sup> We may of course give up regretting. This denial of regret may take one of two forms, one of which is impossible to accept and the other manifestly an unreasonable makeshift.

1. To say that the world is really good, that what we believe to be evil is only good, seen in a false perspective or incompletely observed, is not to avoid the difficulty. If we could only take the true point of view, God's point of view, and see things through to the end, says the idealist, the world would seem fair and all life worth living. But this is only a stop-gap and a makeshift. We cannot rest in such a position, despite the authority which may sanction it. For the question cannot be put by, "How is it that we do not take the proper view?" And in the fact that we do not is the real evil, that

"Horror and scorn and hate and indignation"

should be present in a good world. And for this there is no answer. The

<sup>4</sup> *The Will to Believe*, p. 162.

world would be better without them, and yet there was never any possibility of its being without them.

2. The alternative is to renounce value judgments altogether, to train ourselves as dispassionate spectators who ignore the good or bad apparent in the scene which we survey.

Neither of these attitudes appears reasonable. Man is hardly in a reasonable situation if he must thwart or pluck out a very powerful movement of his passional life. Nor is he in a reasonable situation if he must consider existence evil, all that he finds admirable being bound inseparably with all that is horrible and loathsome. We would never inflict upon a friend, that is, upon a person whose needs we understood and with whose interests we sympathized, a life of suffering and suspense, the only possible result of which he knew to be quite insignificant in the light of ends that he cherished. Such treatment would be in the common ethical sense of the word "unreasonable." And the order of things is indeed unreasonable if that most impressive aspect of man's soul, his sense of value, is really out of place and insignificant.

To be sure, there are some who believe that the determinist attitude is really the more satisfying. It brings a serene and peaceful acquiescence, a recognition that "Earth and high heaven are fixed of old and founded sure," and that enthusiasm and defiance are but the acme of futility. Spinoza long ago hailed determinism with joy. Of the doctrine he wrote: "This doctrine contributes to the welfare of our social existence, since it teaches us to hate no one, to despise no one, to mock no one, to be angry with no one, and to envy no one. It teaches everyone, moreover, to be content with his own, etc."<sup>5</sup>

Now, it is certainly true that a belief in determinism has produced such characters, notably Spinoza himself. But there is clearly another side to this. If the Spinozist is to be consistent, he must renounce value judgments altogether. However, when Spinoza writes of love he tells us that only love which recognizes "freedom of the mind" as its cause is worthwhile and enduring.<sup>6</sup> "Freedom" here means self-control, clarity of mind, and grace of conduct. Such virtues are essentially admirable. But, if determinism undermines anger and scorn, what does it do to genuine admiration? To be sure, such a character as that which Spinoza describes would be of the greatest use to us, dependable and trustworthy. But only a depraved man would care to describe his friends as merely "useful." Disinterested enjoyment is essential to genuine friendship and

<sup>5</sup> *Ethics*, II, 49, note.

<sup>6</sup> *ibid.*, IV, Appendix, 19, 20.

if disinterested anger or disappointment is impossible for a determinist, I fail to see why disinterested admiration should be otherwise.

Determinism is then an impossible doctrine for one who seeks a reasonable solution of the human situation. For this reason James deserted it and urged a philosophy of radical indeterminism. According to this philosophy, chance is real and events are not entirely bound up with the world as a whole. From this point of view, evil may be attributed to chance failure in a scheme of things directed toward the attainment of goodness.

Now, we may find another reason for taking the same direction in our thought. For there is another aspect from which a philosophy of determinism is unreasonable. This is owing to the fact that in a determinism the concept of agent is difficult to entertain. James has spoken of a presentment of our own power of initiation, a power which is to some extent the source of our actions. We need not consider such feeling as evidence of self-originated freedom. Rather our point would be that to deny man this power of initiation is to refuse to interpret as significant a singularly prominent aspect of his moral experience. It is to deny that he is an agent. For if man's actions are the necessary result of the wide history, physical, psychical, and social, in which his own history is immersed, we can hardly call him an agent. On such grounds we are bound to consider him as a phase of that greater history of which he is an outcome, and in whose course he is a moment. On such a view man is a vehicle of history, the outcome of past history. He is not an agent contributing to history.

In this I think that James is again right: pluralism—and by this I mean a pluralism of agents—is only conceivable if the course of history is permeated by occurrences to some degree contingent. This contingency might separate the agent from his environment so that he may be said to originate a contribution to the history of which he makes a part.

The two views may be distinguished in this way. After performance of a deed—good or bad—the determinist may not say "This is what I have done." He may only say "This is the latest stage of my history." His attitude, if consistent, can be best summarized in the exclamation, "So this is my life," or, even more universally expressed, "This is historical reality." The difference between this and the attitude expressed in "I have done this thing" is a profound one. Thus reacting against the dominant philosophy of his period, James directed his attack upon determinism.

But James was essentially a humanist and, I suspect, would have attacked indeterminism, if it had endangered the reasonable view of life which he chose to defend. This, indeterminism might well have done. It might, for instance, have threatened the foundations of ethical thought by defying philosophy to show how man may plan for his future in the face of his own will, unreliable and explosive as it is. Sheer indeterminism is as insidious as its opponent.

The great problem then is this. How to introduce spontaneous agency and chance or contingent becoming into our world-theory and still allow a reasonable ground for the exquisitely articulated system of our knowledge, both scientific and practical, which it would be intellectual suicide to deny? This problem is the central battle ground of many centuries of speculation, and the struggle was never more acute than in the years of thought which follow Descartes and culminate in the metaphysics of our own century. This period, from Descartes to our own day, has witnessed the conflict between purposive and non-purposive or vital and physical process, which complicates the situation by adding a new sort of determinism to the set of concepts involved.

In the remaining chapters we shall describe modern philosophy's endeavor to build a reasonable philosophy above the contrarities of modern thought. We shall study the philosophy of creation, the first of all the attempts since the days of Plato and Aristotle to pass successfully between the Charybdis and Scylla of chaos and determinism.



### CHAPTER III

## THE HISTORICAL BACKGROUND OF THE PHILOSOPHY OF CREATION

THE philosophy of the seventeenth century, accepting as it did the notions arising from scientific investigation, set the problem of modern thought. This is the question of the reality of human will and human purpose. We have seen that Descartes finally avoided the problem, shielding himself behind emphatic dogma. But those who came after him studied the situation more conscientiously and found that Descartes had left a great deal unsaid. At this time, reconciliation of will and scientific order became frequent, too frequent to be convincing. We do not find in the decades of speculation immediately after Descartes any successful solution of the difficulty, although there are plenty of systems constructed to face it.

This problem is the skeleton in the closet of modern philosophy. More time has been spent denying that it is a skeleton than in admitting its existence and seeking to remove it. Hence the history of the discussion may seem to be only of antiquarian interest. This is, however, not strictly true. Years of struggling with a problem widens the horizon and sharpens the insight of students, and it is so with the problem of freedom. Although no really satisfying solution is offered for centuries, the opposition between will and order becomes more and more subtly stated, and new ways of considering the situation are supplied. Hence anyone who has any interest in what we might call the embryology of ideas will find something worth considering in the history of the problem. Only let him remember that the study is complicated by the fact that the embryo is articulate and even vociferous, always asserting that he has attained his majority.

After Descartes, faith in indeterminism ceases to appear in high places. The great minds are dominated by determinism. Hence they attempt to disguise the predicament into which they fall and to maintain that determinism cannot undermine the reality of human will. This procedure involves two arguments, 1) that the intimate relation of thought and mechanical causation need not destroy the validity of final causes and 2) that determinism in general is not in conflict with gen-

uine freedom. Freedom is then defined, under point 2, as self-control, supported by an understanding of one's own character and environment. This, of course, is a sort of freedom, freedom from the maelstrom of passion, and self-deceit, and petty annoyance; and it has always been held as an ideal of moral life. But such a theory fails to meet the spiritual problems of determinism, for it offers no answer to the dilemma of determinism nor does it, without further argument, introduce a defense of human agency.

The first point offers more interesting discussion. Leibniz attempts to reconcile final and mechanical cause as follows. God, in creating the world, has chosen its every detail and will have it no other than it is. This world contains many minds, inspired with multifarious desires and purposes, and a great network of efficient, transient causes linked together necessarily according to rules. These two realms fit together perfectly, God choosing them as one creation. It is as if the world of physics were a player piano set to accompany a singer through a chosen repertory. The singer is the finite mind, and the combined performance is best of all possible performances, it having been chosen by God in every detail, despite the free choice which the singer is said to exercise.

This doctrine of preestablished harmony has not been kindly received, once its first burst of popularity passed. To explain such intricate difficulties by appeal to a *Deus vult* is hardly to offer a solution. Furthermore Leibniz has not escaped from the dilemma of determinism. None the less, when he suggests that scientific order is a pattern selected to accompany and to harmonize with vital process, he points the way toward considerations which in Kant, Schelling, and Fichte make possible the philosophy of creation.

The essence of Leibniz' contribution toward the historically distant philosophy of creation is this. Entities may be woven together externally according to one scheme, i.e. efficient causation, and express themselves or realize value according to another scheme, i.e. final causation, the two schemes being held in harmony. But it is pointless to press an investigation at all closely into Leibniz' theory, because the niceties of the relation of one order to another are obscured by the appeal to God's choice of a preestablished harmony. We shall find a more tangible account of this harmony in Kant and Schelling, where it is united with a theory of esthetic or creative activity.

Everyone knows that Emmanuel Kant raised philosophical barricades about Newton's physics in an effort to save its fundamental

philosophical concepts from the criticism of the empiricists. These thinkers treated the scientific activity in a most unreasonable manner, reducing all prediction and understanding to mere generalization from past sense-experience, thus quite ignoring the mathematical aspects of modern physical science, and the notion of compulsion or necessity which seems bound up with the idea of cause. Kant tried to show therefore that experience of events in time involves the fundamental principles of determinism. In the flow of temporal phenomena (= events open to mind) one event must follow upon another according to a necessary rule. This is a fundamental principle of the world that lies open to the senses. But Kant, wishing to save not only scientific order but also human will, indicates another "world"—the supersensible, according to which realm of discourse, freedom or voluntary autonomy is possible. We shall in another context<sup>1</sup> examine Kant's argument concerning the determinism intrinsic to temporal phenomena. Consider now Kant's theory of freedom and its place in the universe.

In the realm of purely rational, supersensible experience, Kant suggested, human freedom might have its origin. Man, as a metaphysical amphibian, belongs, according to Kant's suggestion, to the two worlds. He is autonomous when he acts rationally, for then he is claiming his right as a member of the intelligible world, and his action is a logical one, determined by ground and consequent. When he fails to use his reason, when he merely follows impulse, man belongs solely to the sensible world and is determined in his action by laws of cause and effect.

Nature obviously did not intend man for happiness. For had she wished man to be happy and no more, she surely would have entrusted his happiness to instinct rather than to reason, which in man holds but a fluctuating supremacy. But since nature has given man his reason to pilot him, we may assume that she intends him to live rationally even at the expense of happiness. Rational life then is the prime goal that we must pursue.

In the *Metaphysic of Morals* Kant offers a formula, the famous categorical imperative, by which we may test the rationality of our actions. The distinctive character of reason being, he thinks, its universal application, he decides that if we can universalize a contemplated action, i.e. if we can conceive of all men acting thus under similar conditions, without having to admit that the universality of the act

<sup>1</sup> See below, pp. 153 ff.

undermines the possibility of its performance, we may consider it a good act.

Now, this supersensible world, in which the good man may achieve freedom, is a world of organization not of causation. The relation between whole and part, therein established, is rather purposive than mechanical. Just so a phrase exists in a composition, not because of any *vis a tergo* production but for the sake of the whole meaning which would be imperfect without it. So the organs perhaps in a lesser degree are related to organism which in turn makes their existence possible.

Why is it that we do not become directly aware of our membership in such a realm? Kant answers this in his last great work, the *Critique of Judgment*. He argues that this is because of the way in which our minds cut into reality. Our experience is temporal, essentially inseparable from change. The content of our "sensuous intake" is limited and we have to piece our knowledge together out of a series of glimpses, one following after another. Such a limited way of knowing must miss certain aspects of things, and Kant undertakes to show just how the importance of final cause is overlooked. Let us employ the following analogy to illustrate Kant's use of ideas drawn from his study of esthetics.

Suppose that we have through some paralysis of our mental functions to consider the words of a poem as disparate, suppose that instead of reading we move from word to word, recognizing the sound qualities of each syllable, that is, whether it is stressed or unstressed. Suppose also that the meaning of the words is confined to their dictionary definitions, which we fail to weave together into significance, somewhat as we fail to handle a language whose syntactical forms are beyond us. In even a simple stanza there would be a considerable amount of order to be discovered by this method. The sequence of stressed and unstressed syllables composing each line might be schematically expressed and a special type of order revealed. If we move, ant-like, from one word to another we may be tempted to suspect that the whole stanza is to be explained in terms of formulae such as those which we have used to describe rhythm and rhyme.

We might believe this if we had not enjoyed the poem, that is, if we had not been aware of its meaning and felt the force of its expression. For such an esthetic experience, "running through" the lines word by word is not enough: whole phrases must be taken together and the meaning of the several words dovetailed, or, better, fused together to yield continued and coherent significance. To be sure, the incomplete

vision might reveal something of the artist's technique. But technique aside from esthetic effect is a sadly incomplete vision of poetry, something like the American schoolboy's appreciation of Virgil. To apprehend the verse, we must see all the parts as caught into a whole, within which the parts are significant. Such apprehension is totally different from the schoolboy's piecing together. Whereas in the latter we have sequences of words, in the former we have meaning which is diffused throughout a number of words and which is a factor in the appreciative apprehension of these words just as it has been a factor in their selection by the artist. Only then does the apt choice of words manifest itself and the rhythm seem to melt into the meaning and atmosphere of the whole.

Thus for Kant is the realm of order and the realm of will to be contrasted. Man's understanding is thoroughly at home only in the realm of order. We can be much surer of observed sequences that can be schematized than of any meaning we may discover in "life" or in history. This is because we can never have a view of the "verses" of life or of history, except by running through series of events whose juxtaposition seems almost arbitrary when we begin to creep from point to point. Hence we grasp no significance, nor can we be absolutely sure that there is any. Order we do finally discover but it is the order of regular sequence, that can be schematized rather than appreciated.

Kant develops this distinction with wonderful subtlety. We cannot see the world as the embodiment of purpose or meaning. Strictly speaking, this is because we must begin in experience with partial glimpses and derive wholes or patterns of parts from these; whereas it is possible to conceive of a mind for which the whole is the first datum or at least a datum given along with the parts. If we do not begin with the whole, it will not seem an essential ingredient in the life of its parts—it will seem to be a resultant of the parts. Hence causation will take the place of organization in our interpretation. Now, owing to the form of our experience, we never do begin with a whole, we begin with glimpses. Hence causation, rather than embodiment of meaning seems the universal form of world-order, although this is interrupted here and there by the appearance of adaptation in biology, by the sense of duty, and the idea of value in esthetics.

Kant suggests, however, that another form of knowledge exists wherein *whole* is as primary a datum as *part*. For this experience the meaning, purpose and value of events is suffused throughout their ap-

prehension. In such a way does God know the world, the true world which our manner of experience obscures from us.

In a world organized according to such a principle, ends and purposes are the moving forces. Hence those who are capable of action springing purely from purpose, free from mere "heteronomous" desire, are self-legislating members of a world constructed on the principle of value rather than upon a blind chain of causal necessity. These autonomous agents realize the implicit dignity of human nature.

Kant does not escape from a finalist eternity, for the world of ends and values is not a temporal one. But certainly he intended to do justice to the real independence of the dutiful human spirit. To be sure, the relation of the creaturely agent to divine omniscience and omnipotence is left without articulated description, but Kant's way of approaching the problem remains supremely important, a source of much suggestion and inspiration to all later thinkers.

Of especial significance is Kant's treatment of genius and his comparison of genial apprehension to divine knowledge. Genius produces its creation according to no pattern, the pattern of the work being complete only with the work itself, whose finality or purpose is realized only with the embodiment of the work and not in conception. Thus the work of the genius is exemplary, not subject to rule but giving the law to itself. Hence, we may add, it can be appreciated only by an act of genius which grasps the unique and proper life of the whole along with the parts. Thus *we* can hardly appreciate nature's genius.

Kant's contribution is then essentially this: It may well be that scientific order is not really irreconcilable with value and the realization of finality. The two may stand together as do technique and meaning in a successful work of art. It is man's ontological predicament that he can see only the technique with satisfying clarity.

This view is again expressed with profound insight into the psychology of creation by Kant's follower Schelling. But this attitude is peculiar to the romantic movement and cannot be confined strictly to the writings of individual thinkers. None of the romantic poets and philosophers escaped the dominance of the notion of logical stability with the single exception of Fichte and he only in a work which appeared posthumously. But there is a change of front and of emphasis which has a profound influence. The whole movement insofar as it has real philosophical value, may be summed up as follows: To understand in the usual sense of the term is not the culmination of knowledge. There is something more revealing and more significant than under-

standing. Understanding is limited to the apprehension of comparatively superficial principles. To know fully and intimately we must surpass all principles and abstractions and apprehend the concrete itself. Some romanticists call the faculty of true knowledge reason, some imagination, others intuition, and there is a wealth of interpretation advanced concerning them. Wordsworth and William Blake call this faculty imagination, and Wordsworth indicts understanding with the statement

"we murder to dissect."

Blake tells us that reason (for him the term refers to understanding) can move only on the "same dull round." Imagination alone makes real discoveries. And the nucleus of the new thought seems to be in Goethe's belief that life is a process which makes its way in some measure independent of rational principles.

Grau, theurer Freund, ist alle Theorie,  
Und grün des Lebens goldner Baum

is good romanticism even if put upon the tongue of the devil. In art the customary, the regular, the universal, is only the skeleton which is carried along in a plastic development.

Even Hegel's dialectic reflects this thought, where we find logical principles being continually transcended and higher, more inclusive, and more truly concrete principles revealed. This dialectical movement is above the understanding, a process wherein thought produces itself and its own determinations.

There is in such philosophy always the danger that the concrete will be hailed as something entirely opposed to principles. We at times hear philosophers crying out against all logical thought since it does little more than distort its object. The relation of purely discursive to intuitive or creative thinking is one of the nicest problems which the philosophy of creation has to face.

But the romantic contribution in its lasting form is essentially this: The beautiful things which we create and the beauty which we perceive in nature (and at last we learn that everything real is beautiful if seen directly) are, so to speak, super-rational because they are unique. We cannot exhaust their meaning by classifying them nor can we treat them as fictions of something other than themselves. If we do this they will cease to be beautiful as they seem to lose the intimate selfhood which we once recognized as beautiful. Here in the unique life of each object is something which quite surpasses determination, something

which does not belong to an order, although, of course, it may contain much order. Thus when Blake tells us that reason sees but the circumference of things, he means to say that reason, understanding, touches only the boundaries, the definitions, the relations of things rather than their reality. This reality is present only to the mind that creates them or appreciates the act of creation which first produced them.

This creative act receives considerable analysis from Kant's brilliant follower Frederick Schelling.<sup>2</sup> In his philosophy the sharp Cartesian distinction between the voluntary activity of mind and unconscious natural order is retained; but it is made the starting-point of philosophy rather than the last word. For Schelling the sharp distinction cannot be ultimate. It is apparent that acts of will culminate in objective situations which are suffused with unconscious or objective order. Further, in successful esthetic activity will is at last identical with its object. Value and structure are found together. Subjective will is at peace with objective form. But although will and order cannot be separated in actual life, they are upon inspection very different things. Teleology and structural causation are "absolutely" different, one from another, as different as syntax from an emotion which calls for expression in words. This difference Schelling presents without overmuch exposition or argument. He relies implicitly upon a common sense charged with the Cartesian feeling of the distinction between objective mechanism and subjective purpose.

Schelling's philosophy is presented as a transcending of this absolute dualism. This form of statement which suggests that beauty performs the "impossible" by harmonizing the two aspects of things somewhat obscures Schelling's meaning for the modern student and conceals the actual derivation of his ideas from the common human experience of beauty. Now, this experience does clearly suggest the way in which the reconciliation may be made apparent. The only union of will and order of which we possess obvious concrete evidence lies in the esthetic activity. This activity is the synthesis of two tendencies, manifest respectively in the artist's feeling for technique and form, and in his desire to say or express something. Thus creation is an act of embodiment which unites these two tendencies, whereby certain ends or objects of the will are at times successfully embodied in a concrete structure. This act of embodiment Schelling considers as resolution of conflict, the conflict which the artist feels to exist between his medium and his

<sup>2</sup> *System der transzendentalen Idealismus*: Section VI.



ideal. The stubborn resistance of the medium and its final surrender to a desired pattern is the life of creation. To recognize that such conflict has in a certain object been overcome is to enjoy beauty. To do this we must see structure enlivened by the presence of meaning. Without such insight, our view of things can be only superficial.

Schelling realized that such agreement between the voluntary and the objective can neither be predicted nor fully described before its appearance. It is, in a real sense, unexpected, entering upon the scene, as it does, through an insight or intuition which Schelling describes as receipt of "grace." Successful embodiment is by no means contained in the medium, it can hardly be called potential in it, for the essence of the creation is born in a moment and is always fresh and delightful in its novelty. Such grace like death overcomes us despite ourselves, but Schelling has in mind only the unreflective or spontaneous moment of creation.

Without creation or genius, order may be understood as we may understand an art-technique without expressing anything through it. And without creation we may desire to embody some end or ideal. But neither learned skill nor sentimental desire can produce anything without genius, which is the union of the two. Genius is the "highest absolute reality, which is itself never objective, but the cause of all objectivity." Without it the world would fall into a conflict of irreconcilable forces and the Cartesian dualism would be supreme. But even Schelling seems afraid of his most precious concept, for he speaks of it as something dark and mysterious nor can he really admit it to full metaphysical supremacy. He forces genius into a position subordinate to the notion of logical stability. By so doing he escapes from the painful admission that genius creates out of nothing in a flux of becoming. We are told that the union of objective order and subjective aim is really a preestablished or eternal harmony, and we soon realize that Schelling's genius is perilously close to Spinoza's substance.

Even here the real is one and immutable. Hence creation as we know it—a continuous process of organization—cannot be real, for the world cannot *become* organized. Its structure is immutable. So Schelling retreated into the cavern of the absolute. Here reality cannot appear as an artist at work, rather as an art product finished without loose ends or open possibility. In the absolute there is no possibility that is not thoroughly interwoven with actuality.<sup>8</sup> Possibility stands alone only to the

<sup>8</sup> See Schelling's dialogue *Bruno*.

eye of the finite being who, steeped in time, cannot grasp the full concrete nature of the future.

This means to anyone but a German romanticist or a platonizing theologian that there is no possibility at all but an absolute actuality, James' "block universe."

/ Thus Schelling really advances hardly a step beyond Kant. Despite differences of presentation he concludes with an eternal absolute in which value and structure are held in esthetic union. The famous "advance" which is usually attributed to Schelling, which lies in his attempt to prove that his philosophy is self-evidently true, involves no contribution to the structure of creationist doctrine. None the less, no student of Bergson or Boutroux can read Schelling's defense of art as the "organ of philosophy" without realizing that here their ideas lie in origin. Again we are told that nature is a creator seeking to embody its own creative power in its creatures "ein ganzes unendliches Leben darzustellen und durch vervielfältigte Spiegel zurückzustrahlen." This ideal is reflected in creation as meaning is reflected in words. In such passages the philosophy of creation flourishes.

For Hegel the universe is likewise a process of revelation, the revelation of the Absolute Idea. There are many levels of such revelation, the famous categories of the logic. We pass from one category to a higher, caught in the inevitable power of this revelation. To state the case for any of the lower categories is to pass through contradictions to a richer comprehension of the logical situation, this involving a category of profounder application. Such a vein might suggest that history, one phase of the absolute's manifestation, is a real production. But although we find that the Absolute Idea is an idea of progress we learn in time that there is no progress of the Idea. To be sure, we can extract passages which speak of progress but in their full philosophical context this is erased.

Take for instance the following mention of progress:

"The religious mind . . . views the world as ruled by Divine Providence, and therefore correspondent with what it ought to be. But this harmony between the 'is' and the 'ought to be' is not torpid and rigidly stationary. Good, the final end of the world, has being, only while it constantly produces itself. And the world of spirit and the world of nature continue to have this distinction, that the latter moves only in a recurring cycle, while the former certainly also makes progress."<sup>4</sup>

<sup>4</sup> *Encyclopedia: Science of Logic*, section 234 (end) (Wallace's translation).

Contrast this with the lines which immediately precede it in the text :

"Nullity and transitoriness constitute only the superficial features and not the real essence of the world. That essence is the notion *in posse* and *in esse* : And thus the world is itself the Idea, and all unsatisfied endeavor ceases when we recognize that the final purpose of the world is accomplished no less than ever accomplishing itself. Generally speaking, this is the man's way of looking ; while the young imagine that the world is utterly sunk in wickedness, and that the first thing needful is a thorough transformation."<sup>8</sup>

Here we find the conflict of German romanticism clearly evident, the idea of creative production at odds with logical stability. It is not surprising that we find Hegel, with Leibniz, arguing that freedom is rather self-control than caprice and thus avoiding the need of creative contingency in nature. Hegel is really much more of an absolutist than a believer in any doctrine of dynamic production.

Alone of the great idealists, Fichte escaped from the frozen eternity which claimed both Schelling and Hegel. This he accomplished only in his latest writings. All of Fichte's writing centers about the concept of the Ego, from whose activity are derived the concepts of logic and of ontology. This Ego is Fichte's version of the absolute.

Reality is selfhood trying to reproduce itself in its thought. All creation, everything save egocentric will, is the product of this activity of selfhood. The Ego produces two types of reality, the actual world, usually called the world of experience, and a realm of super-actual principles, the rationalist imperatives of the Kantian ethic. It is the characteristic essence of the strong and healthy Ego that its super-actual principles are united with actual events produced. This is the autonomous life so valued by Kant. Now, in the production and recognition of principles relevant to the actual scene in which the Ego finds itself, something very similar to temporal creation is involved. The judgment that in "this given situation" such and such an action is the right one is not wholly founded upon experience, for it involves appeal to the rationalism of duty. But the judgment does not remain on the purely rational level because it indicates not only a law but a particular action to be taken. The judgment seems to be the willing of this action. The content of this act of will is not implicit in the Ego's past. Through this decision the Ego grows and also with it reality itself. "The product [*Bild*, produced appearance] is not an element originally given in the whole

<sup>8</sup> *Encyclopedia: Science of Logic*, section 234.

system of absolute knowledge, but it is a product of a fresh creation, passing from the (old) real to the (new) real through an absolute widening of the area of reality and of the Ego. . . . The product [*Bild*] must be intuited as—a new reality.”<sup>6</sup>

Thus Fichte describes an act in which essence and existence are produced together. This act lies in the resolution of moral problems, where essence must contain the rational mainspring of duty and where existence must embrace the particular situation which sets the problem.

But the idea of creation lies hidden in Fichte's posthumous writings without apparent influence. Besides, Fichte does not find creation in nature and in life, but in the categorical imperative. Certainly in Fichte's day the time was not ripe for a philosophy of creation embracing life and the history of organism. The theories of organic evolution with its denial of the eternity of species and that of the great geological age of the earth have rendered this idea more plausible. But even this assistance is insufficient to overcome the prejudice which holds logical stability in dominance. To shatter this prejudice has been the work of the leaders of the philosophy of creation in its final emergence after the romantic movement. The more recent theory may be said to derive from a union of the Kant-Schelling idea of esthetic or organic whole with the idea of actual process or temporal change. Organism, as we have seen, is a harmony of general purpose or function with the particular structure which embodies it. Now, if we are to advance to the contemporary position, we must be willing to consider this harmony as something in the making, something which grows. We must consider as our analogy not only the structure of a complete work of art, but we must do what Schelling started to do, we must consider the origin of the work of art, its temporal passage from conception to concrete embodiment. We must compare reality not to realized beauty, but to the stormy struggles of an expression that is ever reaching beyond itself. We must, in other words, quite deny the principles of the ontological argument and learn to look upon the growing whole as imperfect. The metaphysics of this *credo* is involved and dangerous, requiring the most mature consideration.

After Schelling the creative philosophy endures in its purest form no longer in Germany but in Paris. To be sure, there are irrationalists in Germany, Schopenhauer and his followers. But Schopenhauer is steeped

<sup>6</sup> Fichte's *Die Tatsache des Bewusstseins*, 1831, in *Nachgelassene Werke*, Vol. I, p. 434.

in determinism. The genuine logic of creation is cherished and preserved most jealously in France where we find a clear tradition of speculation which avoids on one hand the unwieldy complexity of German system-building and on the other the timid platitudes of British empiricism. The French tradition springs at least partially from German sources. Ravaisson, the father of the French creationists, drew if not his inspiration at least some of his concepts from Schelling whom his admiration once led him to visit in Munich.

The French school is marked by an intense devotion to the philosophy of human freedom and a belief in the reality of human agency. There is also the romantic enthusiasm for creative genius which also characterizes the school's German predecessors. Further, some of the French thinkers avoid the difficulties of absolutism by an emphasis upon contingency which is at last described as the result of creative activity.

Of this French school we shall study Ravaisson, Boutroux, and, at greater length, Bergson, ignoring Lachelier, Secrétan, and Renouvier, who although interested in the same problems—primarily those of freedom and contingency—do not accept creation as the temporal source of the world.

Félix Ravaisson (or Ravaisson-Mollien) is a thinker who has not, at least in the English-speaking world, enjoyed the fame which his enormous philosophical influence deserves.<sup>7</sup> Ravaisson was a scholar of rare attainments and a philosopher of real subtlety and insight. A connoisseur, a collector, a classical and archeological student, and the founder of one of the greatest schools of modern philosophy, Ravaisson led a life of varied pursuit and achievement.

Ravaisson's thought is expounded briefly in the last chapter of his *Rapport sur la philosophie en France au XIX<sup>ème</sup> siècle*. Here he sketches the first principles of his metaphysics. Ravaisson never completed a system. As a true romanticist, he distrusted the abstract. Thus he shared the artist's feeling that analytic knowledge and classification should not dominate the philosopher. Thus he felt that philosophy is too often blind to the individual, looking upon it as a mere combination of universals or abstractions. Ravaisson offered a clear distinction between analysis and synthesis, in an attempt to avoid abstract thought. "Elements are materials, form the mode of their compresence (leur mode d'assemblage)."<sup>8</sup> Unless we capture this form, explanation is mere intellectual

<sup>7</sup> See Bergson's tribute to Ravaisson *Institute de France, Acad. de Sci. mor. et polit.*, 1904, p. 673.

<sup>8</sup> *Rapport*, p. 236.

destruction. Even inductive investigation is lost apart from imaginative divination which grasps a first premonition of form as distinguished from factual material.

Ravaisson interpreted life or organism as an objective example of this synthesis. This he sharply opposed to mechanism where the parts dominate the whole rather than the whole the parts. In synthesis parts are dominated by a form.

Both art and life are creative. Both are the embodiment of a generative idea in a multiplicity of structure. An *idée maîtresse* presides over the growth of every work of art and dominates the development of every organism. In the organism there is a pattern or plan which expands and preserves itself as the life of the plant or animal.

"To explain a phenomenon another phenomenon suffices. . . . With organisms it is otherwise. . . . Here we no longer think in a vague way that a cause is necessary: we think of the cause as something analogous to the idea which in the case of a machine of our making or a work of our own art dominates the whole, the thought which actually persuades all the parts to one end."<sup>9</sup> Owing to the presence of such a principle immanent in complexity of structure, organisms and persons are, in a sense, their own causes.<sup>10</sup>

Ravaisson held so consistently to his theory of esthetic organization that he saw how clearly it is to be contrasted with determinism. The life of an organism is to be explained with reference to ends and means and it is obvious that the relation of means to end is not one of *absolute* but of *relative* necessity, relative because after all the end may not be embodied. This leaves an open field for freedom.

"In logic there exists an absolute necessity which binds a proposition to its premises; in nature, there is an analogous necessity which relates an end to its means. The end really involves the means. None the less, the end imposes only this relative necessity which determines the will. This is why, in general, no event ever requires a subsequent event with an absolute and geometrical necessity."<sup>11</sup>

Seen according to temporal order, one event may appear as the origin of another, and hence a scheme of efficient causation is thinkable. But from the point of view of telic creation no absolute necessity exists. How then explain the network of apparently non-telic order

<sup>9</sup> *ibid.*, p. 239. Compare Taine's *idée mère* in *Philosophie de l'Art*, Paris, 1865, p. 64 et *circa*.

<sup>10</sup> *ibid.*, p. 246.

<sup>11</sup> *ibid.*, p. 253.

which pervades nature? This world of natural rhythm is described by Ravaisson as a condescension or relaxation of spirit or will. This analogy is drawn from Ravaisson's early work on the subject of habit, which was to some degree influenced by the ideas of Maine de Biran. Here Ravaisson interpreted habit as the objectification of idea. Habit is the sinking of idea into unconscious performance. Through the formation of habit, mental effort may enrich existence by fusing the non-mental with purpose and idea. In habit consciousness gradually relinquishes something from its sphere of attention, only to surrender it to an enlarged and strengthened unconscious. Thus even matter may be a condescension or relaxation of mind. The rhythms of nature, all that we describe as general or permanent in existence, seems to Ravaisson to be the habitual solidification of mind. Nor does he reduce nature to a mechanism of habit. Even in his essay *De l'Habitude*, where he emphasizes habit far more than in his later writings, he sees clearly enough that will may give form to action which is a fusion of habitual rhythms. To be sure, without a foundation of power, built of many habits, will is impotent, being without means to any end, a creator without a medium of expression.<sup>12</sup> Thus without habit freedom would be impossible in natural flux. Habit links mind to nature in<sup>13</sup> human life, and habit is the source of natural order.

Emile Boutroux boldly linked the idea of creation with contingency. He made room for creation by insisting upon the contingency of the laws of nature. By this he did not mean that their appearance is a matter of chance or hazard. His thesis is rather this: The world of concrete existence is much too rich and various a thing to be drawn entirely into a scheme of determinism. This does not mean that science falsifies nature. It means only that nature is wider than science, even than ideally complete science. Thus the truth that every day, say, one million of the inhabitants of New York City travel along a certain route of transportation does not subject these inhabitants to a hard and fast necessity. This observation concerning the number of travellers reveals to us, in Boutroux's phrase, only the "surface of things." By this he does not mean that there is some supernatural realm to which such knowledge may not penetrate. That there is a realm closed to such knowledge, Boutroux admits but that it necessarily is supernatural he would deny. It is no more than actual concrete existence. This reality, the lives of the

<sup>12</sup> Ravaisson's doctoral dissertation *De l'Habitude* (1838 and 1894), Baruzi's edition, Paris, 1927, pp. 55, 59, 61.

<sup>13</sup> *ibid.*, pp. 40, 62.

many citizens of New York, the law in question penetrates but slightly even though it is a perfectly valid statement.

Further, the actual world is never "exhausted" when studied in terms of quantitative law, for the reason that we never reduce the buzzing confusion of quality through which the world is revealed to us to a clear-cut quantitative scheme.

"... Is it not likely that the simple repetition of the same quality, a thing devoid of beauty and interest, exists nowhere in nature, and that homogeneous quantity is but the ideal surface of things? The stars, for instance, seen from afar, appear but as geometrical figures, whereas in reality they are worlds made up of a thousand varied substances."<sup>14</sup>

Boutroux has gone even further. The relation between one order of nature and the one "above" it is contingent. The existence of the various degrees is not necessary in theory. For instance, granted the chemical elements, one cannot see the necessity of their combining as cells of protoplasm, sensitive and capable of reproduction, nor again the necessity of the many-celled organisms, systems of the specialized cells, co-ordinated for survival. To be sure, life is built upon chemical compounds but it is not a mere complex of such.

"... The materials do not remain raw or unelaborated: they are ordered, harmonized, disciplined, as it were by superior intervention. According to this view, life is a genuine creation."<sup>15</sup>

By this Boutroux is not referring to any occult entity or to any vital governor which interferes with the laws of nature and produces life—life is not a miracle. Passing from condition to condition, from vital cause to vital effect may be a purely physical matter—even though this passage is dominated by a telic principle of organization—just as, I suppose, a falling body is a physical event even though its path is dominated by a mathematical principle.

It is worthy of notice that Boutroux has clearly anticipated the now famous idea of emergence, which during the twentieth century runs as a sort of parallel to the philosophy of creation.

Boutroux then has found that the laws of nature need not fit the concrete world as a glove fits a hand. Besides there is no common denominator in terms of which all events may be exhaustively treated. This is true because with the various degrees or levels of being there appear new principles contingently related to lower levels. The world

<sup>14</sup> *Contingency of the Laws of Nature* (Open Court translation), p. 29.

<sup>15</sup> *ibid.*, p. 98.



is full of jumps and breaks, full of contingencies. Even so, it is somehow held together. It is not a chaos.

Boutroux's answer is this:

"God is the creator of the essence and of the existence of things. Moreover it is his activity, his incessant providence, that gives the higher forms the faculty of employing the lower ones as instruments. The contingency shown in the hierarchy of the general laws and forms of the world finds its explanation in this doctrine of divine freedom."<sup>16</sup>

This "incessant providence" is creative mind, it is Schelling's genius. The various contingent levels of being are held in contact by its activity, just as the formative mind of an artist unites technique and meaning so that a poetic image has a metrical pattern as a foundation. So in clear-cut doctrine Boutroux reproduces the essential hypothesis of romantic idealism. Nowhere is it expressed more tersely.

Boutroux's lucid clarity is obscured only by an appeal to a mystical experience which for him as for Kant seems to accompany the sense of duty.

"Now abandoning the external point of view where things appear as fixed and limited realities, so that we may fathom our deepest self and, if we can, apprehend our being in its true origin, we find that freedom is an infinite power. We are conscious of this power every time we truly act. Our actions do not realize it, and so we are not this power ourselves. It exists, nevertheless, since it is the root of our very being."<sup>17</sup> This power is God. Those who, like the present author, are unacquainted with the experience described can make nothing but nonsense of such a discussion. But Boutroux's philosophy will stand without this rather questionable support.

Boutroux cherishes the essential tenets of creative idealism: he does not allow his metaphysics to revert into a theological eternity. For the attempt to combine freedom and necessity, examples of which we noted in Leibniz, Kant, and Hegel, Boutroux has nothing but scorn. In an "intelligible" world of the Kantian type where human lives exist as aspects of an eternity no freedom is thinkable. In such a world we would enjoy no real individuality, no independence of will, our own life would be the eternal consequent or condition of equally eternal events, for all would be united in the unity and harmony of the whole intelligible world.<sup>18</sup> To be sure, this is not the same as *vis a tergo* mechanical domi-

<sup>16</sup> *Contingency of the Laws of Nature* (Open Court translation), p. 180.

<sup>17</sup> *ibid.*, p. 179.

<sup>18</sup> *ibid.*, p. 169.

nation, and Boutroux certainly oversteps himself when he says that our acts would be determined "beforehand." In the intelligible eternity they would exist in an organic compresence with all other events. Hence we have a right to say that in this eternal world our actions cannot be other than they are, and this seems to deprive our temporal acts of decision, which depend directly upon their position in eternity, of any significance as contributions.<sup>19</sup>

Boutroux argues that in a world of continual creation in which reality is spun out at the pulsing of time no such comprehensive determinism holds sway. Man is a creative creature. Within the play of contingency which the structure of created law allows, man may shape his own life. This is, we might comment, the only type of freedom which one may reasonably urge. Man cannot deny the principle of gravitation nor the necessity of death, he is hemmed in on all sides by the rhyme and rhythm of cosmic creation which is the material stuff of his own life. But within these boundaries lies a sphere which man can himself dominate.

Boutroux completes his splendid account of the philosophy of creation by showing that man's freedom is not something given him along with his physical equipment. On the contrary it is something to be won. Man can live a life of habit and of accepted convention. He can follow from day to day the same "dull round." But even habit is a sort of divine grace when properly used. It frees human consciousness for difficult tasks and for the enjoyment of difficult things. This is Ravaisson's theory, as also the doctrine that he who does not transcend his own habits is an automaton and must live a life of empty necessity, without the delight of creative work and the interest of weighing alternatives and planning. Such "passive habit" is human bondage. Human freedom is the creative domination of habit or what Boutroux calls "active habit," to indicate that the freest action would be nothing without a foundation of habitual efficiency.

But the philosophy of creation lacks complete development in the work of its first French champions. We are told where to look for instances of creative process. But there is no analysis of the process at all comparable to the subtle insight which we find in Bergson's analysis of "intellectual effort" or in his brilliant doctrine of memory, that well deserve the fame which they enjoy. To be sure, the clarity of Boutroux's general statement of the creationist position is lost in Bergson's

<sup>19</sup> See below, p. 158 *ff.* In an eternity of the Roycean type, freedom is probably thinkable. But Royce meets with other difficulties which we describe below.

multifarious insight. But the philosophy of creation after Bergson is a richer and fuller doctrine than anything ever envisaged by Ravaisson and Boutroux.

Thus the Odyssey of the creationist philosophy is by no means at an end in the thinking of Ravaisson and Boutroux. Its most distinguished champion, Henri Bergson, continues the development and has made the idea of creation world-famous. But, owing to a certain interpretation which Bergson at times forces upon the doctrine, he has very nearly transformed fame into notoriety and honor into scandal. It is strange that the most scientifically minded of the creationist thinkers should bring upon his school the accusation of irrational obscurantism. Still this has happened, and on many sides the philosophy of creation is even today received coolly, owing to apparent perversities in Bergson's writing. For all of this, Bergson has done much service to his cause. He has widened the scope of creationist thought, revealing in some detail its relation to biology and to the philosophy of mind.

The Bergsonian philosophy arose along with Pragmatism, William James and Bergson moving in somewhat similar directions. Both thinkers distrusted reason, or what passed for reason at the period, and sought to free philosophy from the determinist necessity which was identified with rationalism in so many quarters. James sought this knowledge in a union of reason and interest; humane or genuine thinking was described as neither logical abstraction nor sentimental wish, but a mean lying between such extremes, namely understanding inspired and guided by man's "passional nature." Like James, Bergson condemns pure reason and, true to his tradition, chooses creative intuition as the psychic organ which shall reveal the *Ding an sich* to man.

In so doing, Bergson turns upon discursive reason and accuses it of falsifying its object. The realm of natural order in which science rejoices and which constitutes the essence of Descartes's external world is only an appearance—it is the way in which reality appears to reason. This, of course, is not very unlike Kant's tentative doctrine in the *Critique of Judgment* except that Bergson seems to lack Kant's exquisite balance. He calls reason a pragmatic function, an instrument for action and in no sense a mirror for contemplation. Reason possesses survival value but no cognitive value. The plastic stream of creation reason cannot grasp, it tries to reduce the ever various sinuosities into *states* of development. Reason with its spatial spectacles tries to sketch a map of reality and this is philosophically fatal.

Such a map schematizes past and future, indicates typical events which the future must contain. Really it reduces past and future to a spatial present, thus completely missing the nature of real change. But here Bergson is difficult.

Reason schematizes, but Bergson denies that there is anything in concrete, enduring reality to correspond to the scheme. It then becomes difficult to explain even the pragmatic value of reason.

Not reason but disinterested, impractical esthetic contemplation, the lesser image of creative art, reveals the true nature of things. Here Bergson differs from his predecessors in that he does not usually consider creation as a synthesis of patterns such as natural laws or artistic habits. Synthesis of isolated elements is an intellectual not an intuitive or creative act. Creative reality is therefore not synthetic (at least Bergson tries to believe this, although we shall see that he is by no means consistent).

Here again there is affinity between James and Bergson. One has only to read James on the stream of thought to see how very like the Bergsonian flux of duration this stream of consciousness is. The stream is not a series of clear-cut states but a fusion of tendencies. Direction is quite as important as substance. Thinghood is by no means the only *stuff* which we apprehend. Things melt into one another, and the present loses its unique and proper quality if we separate it from its fleeting past. Thus Bergson teaches that we miss the interpenetration of a man's life if we sketch it out into periods. To set a date for a great change of thought is to caricature history. Dates are points upon a map, not moments of creative life. This duration or creative flux is a sort of Jamesian stream of thought enlivened by creation. Here free origination is possible. Scientific order is only an appearance.

Bergson banishes all skepticism by his appeal to the immediate. In fact he dares to assert that he "has no metaphysics." Thus, unlike most modern philosophers, Bergson does not consider the nucleus of his system as speculative. Intuition has changed all that. Once we free ourselves from reason's map-making tendency, we are free to enjoy reality. Hence Bergson is willing to be thought an empiricist, an "experience philosopher." To be sure, this experience is of a "radical" sort and does not support the doctrines of the English school who were as dominated by rational schematizing as were ever the great rationalists.

In the following division of our study we must examine Bergson's thought in detail. This we must do with the greatest caution, for Bergson seems to suggest a short-cut to reality. He seems anxious to sweep aside almost everything that in the past has been identified with intellectual enterprise. Such a philosophy bears watching.

**PART TWO**  
**BERGSON'S IDEA OF CREATION**



## PART TWO: PREFACE

### BRIEF STATEMENT OF THESIS TO BE DEFENDED

THE philosophy of Henri Bergson has been for over thirty years widely known, discussed, and criticized. Adverse criticism has been unusually severe, and on the other hand appreciative enthusiasm has reached at times an amazing intensity. The reasons for such a reception are not hard to discover. Consider the fact that the two most prominent Americans who expressed their views at length concerning Bergson's philosophy were William James and George Santayana. James was enthusiastic in his commendation of Bergson's theory.<sup>1</sup> Mr. Santayana was even more serenely scornful than usual and even more aloof.<sup>2</sup> In his eyes Bergson seemed to have discarded philosophy and to have substituted for its analytic method a literary sleight of hand with which he read unwarranted meaning into subjective experiences fit only for poetic treatment. Santayana was thus chiefly displeased with Bergson's method. James' sympathy was aroused on the contrary by the results which Bergson obtained. Here was a universe plastic and indeterminate in which human initiative was not engulfed in an order of things "fixed of old and founded sure" like the heavens and earth of Housman's despair. Here was a world to which man could contribute his effort, in short, an "open universe." To a thinker of James' spiritual interests, Bergson's philosophy seemed a fascinating attempt to assert significance of human life. But to a man of Santayana's rationalist cast of thought, Bergson's treatment of intellectual knowledge and his tendency to subordinate analysis to an intuitive grasp of reality's primary character could seem nothing but philosophical suicide.

Now, in these two reactions to Bergson's thought we find emphasized the two aspects of his philosophy which must seem most prominent to a critic who desires to grasp its full implications. Bergson's defense of human freedom is undoubtedly a worthy endeavor, successful accomplishment of which would be of greatest importance for philosophy. On the other hand, his treatment of analysis, as it stands in his works, is undoubtedly dangerous. In fact, as critics have shown, it may reasonably be said to undermine his whole philosophy.

<sup>1</sup> *A Pluralistic Universe*, New York, 1909, pp. 223-75.

<sup>2</sup> *Winds of Doctrine*, New York, 1913, pp. 58-109.



Such a situation naturally tempts the critic to essay restatement and reconciliation. This we are bold enough to attempt and our thesis is, in brief, that such a restatement is possible. We shall endeavor to draw from Bergson's philosophy an interpretation of human freedom which would satisfy a thinker of James' type. We shall further endeavor to state Bergson's doctrine of creative evolution in such a form that the most "tough-minded" rationalist may find in it nothing that outrages man's admirable faith in the importance of analysis and of search for a definite structure resident in the heart of things.

We must, however, be modest in our attempt and refrain from asserting the necessity of such a world-view. We can only hope to present a possible interpretation of human experience. That it is the only interpretation tenable we shall find impossible to assert.

Fortunately such an attempt really involves a minimum of original speculation. The entire texture of such a philosophy may be found in Bergson's writings and we shall have only to distinguish the valuable from the valueless by indicating a certain fundamental ambiguity in Bergson's thought. This distinction will comprise the central theme of our criticism of Bergson. Once this is manifest, we shall have little difficulty in showing how one side of Bergson's hypothesis may be developed to suit our purposes.

## INTRODUCTORY OUTLINE OF ARGUMENT

It is, then, the purpose of this dissertation to discuss the central thought of Bergson's philosophy,<sup>3</sup> his idea of creation, and to show its importance for a philosophy which seeks to vindicate human freedom, and to interpret human striving and human enjoyment as something of ultimate value and significance in the scheme of things. In so doing, we shall distinguish two important interpretations of creation present in Bergson's writings and evaluate them. We shall find that his thought contains more than his rationalist critics have realized, although we

<sup>3</sup> Throughout Part Two occur many references to Bergson's works. Wherever possible I have referred to the authorized English translations:

*Time and Free Will. An essay on the immediate data of consciousness.* Authorized translation by F. L. Pogson, London, New York, 1910.

*Matter and Memory.* Authorized translation by N. M. Paul and W. J. Palmer, London, New York, 1911.

*An Introduction to Metaphysics.* Authorized translation by T. E. Hulme, New York and London, 1912.

*Creative Evolution.* Authorized translation by Arthur Mitchell, New York, 1911.

shall admit that at times he oversteps himself, when describing creation, and that he then plays directly into his opponents' hands.

As we have said, Bergson's philosophy really contains two accounts of creation. The first makes of it an absolutely simple and undifferentiated surge towards novelty which is indefinable and quite beyond the powers of thought to analyze into simple terms. Conceptual analysis can only distort our apprehension of this process. It was this aspect of Bergson's philosophy that so scandalized Santayana. The second interpretation offers a more intelligible account, according to which concepts need not be described as instruments of distortion, and for which creation is simple and unique only as regards the form given its production, and not at all undifferentiated as regards the act of creation or as regards the material employed in the act.

This distinction is of first importance since the philosophy of Bergson is essentially a philosophy of creation. Change, which is for Bergson the most prominent aspect of reality, is interpreted as analogous to psychic production or creative, esthetic composition. There is little that is new here insofar as interpretation of reality as comparable to esthetic creation is concerned. More distinctive is Bergson's doctrine that the world is always in the making. For Bergson, the flow of time is a constant outpouring of creation, which is dominated, at least in our domain, by a tendency toward production of higher or more autonomous living beings. The tradition of Schelling, Ravaisson, and Boutroux is obviously Bergson's.

Now, we must test the arguments which lead Bergson to assert that creative process is the *on 'e on* and the power everywhere manifest in reality. Here we shall be compelled to discount Bergson's frequently expressed assurance. We shall have to consider his interpretation of cosmic change not as a truth necessarily forced upon us by philosophical investigation but as a plausible hypothesis whose spiritual significance invites us to consider it seriously.

Consideration of creative process itself comprises the central theme of our work. Here we shall have to distinguish the two interpretations of creation present in Bergson's writings. One is the irrational interpretation and the other the esthetic. According to the former interpretation, creation is a simple undifferentiated flux. This flux is without elements that possess either real or separate existence. What elements we attribute to the process are really only appearance, being manifold views of the indivisible flux, which is creation itself. The process is itself indefinable and cannot be included in rational discourse. This

side of Bergson's thought might be called a philosophy of the inexpressible, since it leads us to a reality which cannot be defined or even discussed with profit. We shall see besides that this doctrine fails to aid one who seeks to assert spiritual significance of human life.

On the other hand, the esthetic interpretation avoids these difficulties. Creation is here accounted for in a manner amenable to reasoning and intelligible presentation. On this view, creation is a fusion of abstract elements which are more than "views taken of an indivisible process." The elements are materials which go into the making of the process itself. Esthetic creation, unlike irrational, can be described at length and there are several passages in Bergson's works where this is done. It is thus unnecessary to discredit intellectual knowledge in order to defend a philosophy of creation. From this position we maintain that a reasonable account of human freedom may be elaborated.

The argument involved in this part of our work may be summarily sketched as follows:

1. Bergson's doctrine of creative process offers assistance toward framing a reasonable philosophy; although

2. the doctrine cannot be applied to reality as the necessary conclusion of any argument that Bergson has advanced, and although

3. the doctrine is ambiguous in Bergson's presentation, resulting as it does from the confusion of two interpretations of creative process, one of which, the irrational, has been with good reason severely criticized.

4. The other interpretation, the esthetic, offers a more favorable development which may be held to supply us with an account of an "open universe" of the sort mentioned above.

Through this argument we shall support our original contention that the spiritual importance of Bergson's philosophy may be preserved even after restatement to avoid the legitimate objections of his rationalist critics.

## PART TWO

### CHAPTER I

# THE FOUNDATIONS OF BERGSON'S PHILOSOPHY

**W**E MAY introduce Bergson's thought most conveniently by describing one of his fundamental distinctions. This is a distinction drawn between two types of system.<sup>1</sup> Bergson has called one the inert and the other the vital or the creative.

An inert series is a determined one, a series whose every moment is absolutely dominated by the rationale of its structure. An accurate plotting of an equation's curve is an inert series or system. A creative series or, better, a creative process is quite different. Creative process is not chaotic and yet it is not dominated from the start by a rationale. It is the order of esthetic process, which is not generated through the presence of any dominating principle, but which may be described as the solution of the problem of expression or invention. It is the Platonic "poetry" which is a "general name signifying every cause whereby anything proceeds from that which is not into that which is, so that the exercise of every inventive art is poetry and all such artists poets."<sup>2</sup> (This passage is illuminating but we shall not interpret poetry further in Platonic fashion.) For Bergson, this process is telic but contingent. It is becoming that grows as it becomes without reference to any being of which it is a *necessary* product or manifestation.

Creative process forms its own structure as it endures. The completion of its work is separated from its beginning not by mere interval of time, which might be compared to the measure of motion along a plotted curve, but by a pulse of duration or invention which separates past from future by more than a mere chronological distance.<sup>3</sup> Time of this sort leaves its mark upon becoming which is profoundly and essentially altered in duration. Such change is not the manifestation of an existing principle or absolute such as the realized and concrete plan of the finalist's God, but really involves the production of a new essence.

Real time or duration is just that activity through which novelty enters the world. Chronological time or time abstracted from concrete

<sup>1</sup> *Creative Evolution*, p. 224.

<sup>2</sup> *Symposium*, 205.

<sup>3</sup> *Creative Evolution*, pp. 15-23.

becoming for the sake of measurement is not creative in function, if indeed it has any function of its own. It is nothing active, it is the standard of comparison of periods of change and serves also to map events in relation to one another as an historian maps the chronology of his subject for convenient reference. Such time is no index of growth or development; it need not involve essential change.

Inert system reduces the future to the present by enlarging the scope of a given situation whose moments are separated only by chronological time. From this point of view, foresight is only completed sight. Foresight is only limited when essential alteration or creation is possible. "The essence of mechanical explanation" writes Bergson, "is to regard the future and the past as calculable effects of the present, and thus to claim that all is given."<sup>4</sup> Finalism is not so bold; it does not involve the doctrine that past and future are related to the present in terms of mathematical formulae. But it none the less holds to inert system. As we have said, the finalist applies to his universe a characteristic of being. He considers it, so to say, all of a piece. The realization of values which are worth embodying is the world-system as seen by its author. Purpose is thus not its fundamental concept. This concept is that of realized value, which imposes as absolute a determinism upon life as do the principles of mechanism. As William James would have put it, for the finalist, "there is no news in heaven."

Bergson's doctrine of creative process derives, I suspect, from the contemplation of esthetic production, which is not without plan of a sort and yet is without final structure or even definite essence until the esthetic act completes its work. In composition, thinks Bergson, we create our own path as we progress through a thousand contingencies. There exist, to be sure, generative ideas, our inkling of the meaning we wish to express and our choice of medium to be employed.<sup>5</sup> But the embodiment of that meaning we cannot hope completely to foretell, for to do so would be to create the whole work beforehand, and so to accomplish our purpose while trying to foreshadow our accomplishment.<sup>6</sup>

Now, we have just seen that when we predict by the ingenious application of a formula, when we advance along chronological time, we are preoccupied with what does not change. We are interested in a present that is pervasive of past and future. Now, it is the same with the metrical structure of a poem, which like the pattern of celestial movements,

<sup>4</sup> *Creative Evolution*, p. 37.

<sup>5</sup> *ibid.*, p. 320.

<sup>6</sup> *ibid.*, p. 6.

pervades a wide realm of change and brings it before us in a scheme that is immune from alteration. Thus we find in the esthetic product a union of both systems, inert and creative. Bergson himself might at times deny this, but at any rate, both systems may be exemplified by reference to esthetic products, such as poetic composition. Here, as we shall see, inert system receives creative embodiment in concrete production.

It is not surprising that creative process, derived as it seems to be from esthetic activity, is bound up closely with intuition. It is to this organ of thought that Bergson turns to support the existence and the actual objectivity of creative process. There are four kinds of intuition worthy of mention :

1. That involved in creation or discovery. Bergson does not define this, but we shall describe it for him as the psychic production of the essentially new.<sup>7</sup>

2. That involved in following or appreciating a creation or a discovery. This may be described as recognition of the new as new, by virtue of the fact that in recognition we follow the path first apprehended by the creator's productive intuition.<sup>8</sup>

3. That which apprehends things with esthetic directness, freeing itself as much as possible from recognizing its subject matter according to customary categories useful in commonplace action or discourse.<sup>9</sup>

4. That involved in the immediate apprehension of relations, the *intueor* of Descartes. These are the intuitions of mathematical calculation, such as steps in the linking of a proof. This form of intuition Bergson does not recognize because it does not reveal a durational or essentially changing character in its subject matter.<sup>10</sup> It is thus for him a function of the intellect and of discursive thinking.

The first two classes of intuition are in immediate contact with dynamic process. The third may be employed to suggest its presence in nature. At times Bergson describes this type of intuition as evidence absolute of such a change in nature, but we shall have to discount this interpretation.

Discussion of intuition of the first type, which is creation itself, will occupy us throughout much of our work. The second is identical with

<sup>7</sup> See for example *ibid.*, p. 239.

<sup>8</sup> See for example *ibid.*, p. 209.

<sup>9</sup> See for example *ibid.*, pp. 1 ff.

<sup>10</sup> See Bergson's letter to Höffding, quoted in Höffding's *La Philosophie de Bergson*, Paris, 1916, p. 161.

the first save that it is assisted and guided by production of the first type. Something must be said, however, about the third type before we undertake the major task of discussing creation itself.

This intuition can only be understood by contrast with intelligence. Intuition enjoys while intelligence systematizes and describes, frequently with reference to possible action. Intelligence is interested, then, in regularity and in recognizable instances of regularity. Thus it is interested in inert system. But intelligence is uninterested in the setting or the concrete environment in which inert system appears.<sup>11</sup> William James writes of Bergson's philosophy:

"The essence of life is its continuously changing character; but our concepts are all discontinuous and fixed, and the only mode of making them coincide with life is by arbitrarily supposing positions of arrest therein. . . . When we conceptualize, we cut and fix, and exclude everything but what we have fixed."<sup>12</sup>

Thus intelligence is really at home only in the "spatial" realm of mathematics, where regularity seems to be everything and is untrammelled by an irregular concrete world. In other realms it cuts and fixes to procure some regular pattern. Hence intelligence ignores things in themselves. We need not say that it alters its subject matter but it may distort it by finding therein only manifestations of regularity. In doing this it ignores what may be unique and, so to say, irregular—irregular, that is, when considered in relation to its past environment.

<sup>11</sup> A. N. Whitehead, *Process and Reality*, pp. 427-8, interprets Bergson's intuition as follows: it is a way of knowing that lies between "physical feelings" and reasoning. It is a function in which the mind rises above mere reception of stimulus or image but still does not undertake out-and-out intellectual activity. Propositions are apprehended in such thinking, but the subject does not bring them to consciousness in their full logical structure. Even so, these propositions give a certain definiteness to apprehension which physical feeling lacks. This new element is an important feature, we may add, of the esthetic experience: the proposition heightens the tension of the apprehension giving the object a concentration which it had otherwise lacked. But these propositions are drenched in the "physical" feelings to which they refer—intellectual abstraction has not taken place. This account is valid enough in as far as it goes—but it refers only to what we have called the second and third types of intuition, to the contemplative rather than creative phase of intuition. It does, however, reveal that intuition of this contemplative type grasps what intellect may miss—namely, the concrete environment and even the real texture of the object apprehended. This is because intuition of the type herein described does not expand the logical complications of the propositions for their own sake—on the contrary its attention is fixed on the concrete matrix in which it "feels" the presence of the propositions. Whitehead is right, I think, in saying that this differs from reason only in degree—that is, I interpret, degree of attention paid to the propositions for their own sake.

<sup>12</sup> *Pluralistic Universe*, p. 253; also *Creative Evolution*, pp. 210-16.

Since intelligence seeks inert system it seeks to describe the concrete as regular with its whole environment. Thus analysis (intellectual thought) is the operation which reduces the object to elements already known, that is, to elements common both to it and to other objects. To analyze therefore is to express a thing as a function of something other than itself.<sup>13</sup> (At the present stage of our argument we can go no further toward describing the place of intelligence and analysis in Bergson's system. His own interpretation is, like his treatment of creation itself, ambiguous and can be treated only with special reference to his variant positions.)

Now, intuition is said to embrace things themselves. The third type of intuition does this less openly than the first two. The third type does not reveal novel structure or organization, but merely notices the presence of continual change and heterogeneity in experience. It is from this flux that intellect abstracts. The fluid, changing aspect of this flux is ignored in ordinary commonplace experience which sees its objects as instruments for action or as desirable ends of action thus recognizing in them their relations to other things, the categories or classes into which they may be placed. The third type of intuition recognizes what such practical apprehension misses. It brings to mind that the world is continual change and that what we call objects and systems of objects are really not so stable as we often suppose. Usually "it is expedient to ignore this uninterrupted change and to notice it only when it becomes sufficient to impress a new attitude on the body, a new direction on the attention."<sup>14</sup>

A subtler type of such intuition is that which recognizes not only omnipresent change but grasps an esthetic quality in this change. An example will illustrate. Bergson refers to our hearing a clock strike, let us say, four times.<sup>15</sup> He tells us that we may become aware all at once of the clock's having struck four times without having counted the strokes separately. This happens as follows: "The first four strokes had struck my ear and even affected my consciousness, but the sensations produced by each one of them, instead of being set side by side, had melted into one another in such a way as to give the whole a peculiar quality, to make a kind of musical phrase out of it. In order, then, to estimate retrospectively the number of strokes sounded, I tried to reconstruct the phrase in thought: my imagination made one stroke, then two,

<sup>13</sup> *An Introduction to Metaphysics*, p. 7.

<sup>14</sup> *Creative Evolution*, p. 2.

<sup>15</sup> From Bergson's *Time and Free Will*, pp. 127 ff. By permission of The Macmillan Company, publishers.



then three, and as long as it did not reach the exact number four, my feeling when consulted, answered that the total effect was qualitatively different."

Bergson has devoted a great part of his first work, *Time and Free Will*, to an examination of the quantitative aspect of perception. His thesis is that the quantitative grading of different sensations as more or less intense degrees of the same experience is a valuable distortion through which we arrange heterogeneous data according to a homogeneous scale of intensity. This scale is adapted to coordinate with the amount of stimulus needed to arouse the various heterogeneous qualities in perception. In themselves these qualities are unique and heterogeneous. This theory allows a qualitative wealth of variation to much experience that seems at first quite without it, and Bergson has developed this thesis very fully with copious examples. We cannot in this treatise, however, expand on the doctrine which is not an essential feature of the theory of creation.

All this goes to show that there is much in experience which we ignore when we consider things intellectually. This, however, does not prove what Bergson would like to show, namely, that natural process is creative and not absolutely regular in occurrence. It does indicate that experience offers some evidence to that effect. But after all why trust experience of one sort as opposed to that of another? The intellect is as much a human function as any form of immediate intuition and as such demands equal consideration. The first step in intellectual knowledge is abstraction from the immediate; but this does not indicate that intelligence will not in the end afford principles in terms of which to explain the apparent irregularities of immediate experience.

To be sure, we always find an aura of apparently semi-regular events about the embodiment of principle in nature. Nothing actual seems so very exact or law-abiding in the final scrutiny made of the tissue of events that surround it. This Boutroux emphasized. Still it is only through faith in this questioned regularity that we make any advance in knowledge. And, at an early or "human" stage of enquiry, is it not presumptuous to deny the existence of a definite complex order of concrete events simply because there is much that seems contingent? We have only to remember that what is now recognized as orderly seemed once nothing but an intricate confusion of brute fact. At times, Bergson realizes this, but at others he takes to describing intuition as sympathizing with objects, penetrating to their very hearts with an "intellectual sympathy," all to indicate that here in the qualitative and

heterogeneous is the *Ding an sich* at last.<sup>16</sup> He is wiser when he retracts his assurance and teaches that we must interpret the world as similar to our fluid and various stream of thought, that is, as rich in unique and changing character, if we wish to avoid the difficulties of an intellectualist philosophy. These difficulties arise from the fact that when dealing solely with concepts we can never tell which one to take as starting point or as first principle.<sup>17</sup> Now, this is perhaps true enough but not sufficient, for we shall see presently that similar difficulties arise once we try to found a philosophy on unique flux. The problem of relating the flux to intellectual order presents as many difficulties as does any philosophical situation.

So further evidence is required; and this Bergson seems to feel. For he seeks studiously in the realm of living things, and from a study of their manner of development he tries to derive evidence for the presence of creative process in nature. In this investigation he does not rely upon the third type of intuition but tries to show that the development and endurance of life is animated by a drive which works after the manner of the first intuition, being analogous to psychic creation.

Bergson would interpret life as creative process, both the life of the individual and the development of biological forms. There is in one respect a marked resemblance between life and creation. A living being, so long as it succeeds in preserving life, must conform throughout its development to some pattern of function that will maintain life. Its growth is not then a matter of manufacture, whose products will function only at the end of a period of construction. Arising from a living germ developing as a living embryo and a living infant, the organism reminds one not of a piece of machinery in preparation but rather of an esthetic production which preserves certain characteristics, analogous to the metrical and grammatical structure of a poem, throughout the whole period of its endurance. Such a comparison seems legitimate when we recall Bergson's occasional use of poetry and painting as examples of creative production. The point of such analogy lies in this. In esthetic composition, concrete embodiment or expression must preserve a certain form throughout. This form is maintained through unforeseen circumstances and problems of expression, which every advance in composition sets before the artist. This is similar to vital function, which differs along with it from mechanical manufacture, in that the latter attains its form only at the end of its development.

<sup>16</sup> *Introduction to Metaphysics*, p. 7.

<sup>17</sup> *ibid.*, p. 43.

Further manufacture removes its product from contingent circumstance. Life both in the individual and the race is not so removed and maintains its form through adaptation to such circumstance. Thus vital development seems not comparable to production according to a plan but rather to esthetic production which proceeds from no more than a chosen topic or subject and a medium of expression, producing answers to its problems as they arise.<sup>18</sup>

Bergson has said,<sup>19</sup> "To manufacture is to work from the periphery to the center, or, as the philosopher says, from the many to the one. Organization on the contrary works from the center to the periphery." That is to say, it preserves its unity or vital structure throughout development.<sup>20</sup>

Again the relation of any single function to organic structure may be interpreted on esthetic grounds. Function itself, Bergson thinks, is a simple act made possible only through a vast complexity of coordinate structure.<sup>21</sup> Coordination is the *sine qua non* of function. Various types of similar function are supported by organic structures of different character.<sup>22</sup> Indeed in some cases, if an organ be removed from a living organism, it will be replaced by tissue of a constitution dissimilar to that of the organ removed. Thus it might seem that development of living forms is carried on in terms of function, structure being, so to speak, the medium in which function is embodied. Function represents the type of coordination embodied in the organic structure.<sup>23</sup> This type of coordination may be repeated in various contexts in each case through a special organization of structure, as an idea may receive various embodiments in different connections.

These two considerations militate against mechanical interpretation of the processes of vital development.<sup>24</sup> These interpretations would employ the concept of manufacture through chance aggregation. Such considerations are also opposed to the teleology which interprets life as a movement toward a fixed goal, the whole plan preexisting and dominating life and development, thus ignoring the fact that life is "productive of effects in which it expands and transcends its own being."<sup>25</sup> Such

<sup>18</sup> *Creative Evolution*, p. 93.

<sup>19</sup> *ibid.*, p. 92.

<sup>20</sup> See also *ibid.*, p. 65.

<sup>21</sup> *ibid.*, p. 88.

<sup>22</sup> *ibid.*, pp. 74-5, 96.

<sup>23</sup> *ibid.*, pp. 95-6.

<sup>24</sup> *ibid.*, p. 38.

<sup>25</sup> *ibid.*, p. 52.

views do not emphasize, as does the creative, the necessity, to which life is put, of preserving a vital form throughout development, nor does it require that development proceed in terms of function.<sup>28</sup>

Thus Bergson draws evidences of creative process from vital functions. He also tries perforce to apply this notion of creation to the order of organic evolution itself. Here he faces rival hypotheses of considerable reputation. It is argued that the development of new forms of life receives its impetus from the contingent appearance in the germplasm of factors conditioning changes in the organism that develops from them. The more fortunate of these contingencies, that is, those that result in abler animals, are preserved while the less fortunate are removed slowly from the field of vital competition. Now, since the germplasm transmits these "potencies" with a degree of constancy to the somatoplasm derived from it, transition occurs in this way from one form of living being to another through the gradual and contingent alteration of the germplasm. This reduces organic evolution to a matter of contingent mechanism.

The doctrine is also advanced in a slightly different form, in which various characters are linked together in the germplasm, their influence upon the somatoplasm therefore being simultaneous. Thus if one unit possesses survival value, the entire connection prospers. In this way, explanation is offered of the origin of more elaborate and complex forms of organic structure. The simultaneous origin of their parts is explained even when the structure does not possess survival value until to some extent developed, for the undeveloped form is saved by its connection in the germplasm with a unit possessing survival value.

Bergson does not deny that such views are based upon a sound knowledge of biology. He quarrels only with the necessity of our thinking the origin of new characters as sheerly contingent. He believes that these views attempt to explain too much. Bergson does not feel that these characters are purely the result of mechanical causes such as the effect of the environment. Natural selection or even the direct effect of environment upon organs cannot build new forms of life. They influence only the sinuosities of the path: they do not produce its direction. How are we by appealing to chance aggregations of characters, even supposing them to enter the arena in couples or trios, to explain the appearance along diverse strands of evolution, among forms of life descended from a very remote common ancestor, of similar types of organs and func-

<sup>28</sup> *ibid.*, pp. 94-5.

tions?<sup>27</sup> The wide distribution of sexual reproduction among both plants and animals is an example of this similarity. The presence of vision is another. It is as if the same artist were expressing himself in similar ways, that is following the same creative impulse, on remote sections of his vast canvas.

But such similarities of structure may, even so, be the result of similar conditions of environment, where circumstances favor the persistence of certain types at the expense of others. The contingent origin of these types must be furthered once they arise, and so in time, granted that our contingencies do not occur without *some* common element of similarity along the diverse strands of evolution, similar functions and structures will appear. Realizing this as possible, Bergson tries to be more precise. He takes, as example, the development of the eye, and he claims to find similarities of elaborate structure along remote paths of life's development.<sup>28</sup>

Now, granted that these are genuine similarities, what follows? Can we argue with Bergson that these resemblances are the result of the same esthetic creation following the same initial impulse or working in the same style? We can only assert this if we can show that a creator would be facing the same situation in the two cases, thus resolving fairly similar difficulties after a similar fashion. This difficulty Bergson seems to realize, for he adds in further support of the argument this statement, which occurs at the very end of his presentation and is really quite unsupported. ". . . No matter how distant two animal species may be from each other, if the progress toward vision has gone equally far in both, there is the same visual organ in each case, for the form of the organ can only express the degree in which the exercise of the function has been obtained."<sup>29</sup>

But this relation of perfection of function to similarity of structure would be very difficult to maintain. Bergson has made much of the fact that a certain mollusc, the Pecten, has an eye with inverted retina, hence of a type similar to the vertebrate's.<sup>30</sup> But, even so, how can Bergson argue, without begging the question, that this mollusc has gone as far toward perfect vision as the vertebrate? Does life face the same problem in both? The assertion seems doubtful and is unsupported. If it is false,

<sup>27</sup> *Creative Evolution*, p. 59.

<sup>28</sup> *ibid.*, p. 62.

<sup>29</sup> *ibid.*, p. 96.  
p. 62.

any similarity to be discovered between the two eyes is beside the point and reveals no creative unity in organic evolution.

So Bergson's attempt at proof seems invalid. His endeavor to include the detail of biological knowledge in his theory has failed. But we must remember that Bergson is really not given heart and soul to establishing the necessity of his interpretation of evolution. At the present stage of knowledge that would be indeed a presumptuous undertaking. He says that he has no intention of presenting a final and mathematical refutation of mechanism in biology. Thus we need not look for certainty in his defense of creative evolution, although the tone employed in the later stages of the biological argument seems more assured than his logic justifies. And for all that Bergson has said in his argument, his logic, if held strictly to the letter, does not escape the criticism made of it by Mr. Santayana who asks why Bergson should not postulate in nature a movement toward puddles of various shapes, since similar instances of these puddles are observable throughout a considerable extent of nature.<sup>81</sup> But none the less, Bergson's review of his material gives us good reason to suspect that life is not formed after the fashion of water puddles. Puddles do not, so it seems, evolve new shapes through the ages, nor will a puddle struggle to maintain a certain structure of organization in the face of circumstance. A puddle cannot be wounded, much less heal of itself if wounded. Puddles, in short, lack vital structure which invites us to speculate upon its power of self-preservation and development.

The above argument introduces creation as a metaphysical principle dominating a large realm of observation. Bergson tried to resolve the problems of philosophy in terms of this principle. Once this is undertaken, differences of interpretation arise. When confined to the realm of life and employed as a counter for mechanist arguments, the notion of creation could be rather loosely interpreted as a driving power which solved its problems after the fashion of an artist at work. This, however, proves insufficient when we face the even wider problems of philosophy. When studied at all closely, creative process reveals embodied within it many examples of articulate structure and even of inert order. Remove such structure and intelligibility vanishes. The poem without order, even inert order, must be contentless—it can have no scheme of meter or of rhyme, nor can it embody the structures of syntax. And apart from a regular, natural order of temperature and food supply without and a rhythm of vital function within, adapted to this natural order, life

<sup>81</sup> *Winds of Doctrine*, p. 92.

would be nothing at all. The plasticity of creation must be reconciled with the omnipresence of regularity.

How then is creation related to the patterns of regular repetition without which it can be nothing but chaos? Bergson's answer to this question involves him in the conflict of which we have spoken. On the one hand he describes order as something opposed to creation. Creation is then an unintelligible and undifferentiated flux, which is somewhat thwarted by the presence of inert order, its mysterious opposite. This opposite has appeared upon the scene owing to a relaxation of creative process, which for some reason unmakes itself continually and then quarrels with the result. On the other hand, we have a somewhat more intelligible account of creation. For Bergson at times writes to the effect that creative process, far from being aloof from structure and differentiation, actually embodies such structure in its concrete products. The process which brings this about is described in an unusual way but is by no means unintelligible. In this process inert system might be present as one of the goals of embodiment just as a definite rhythm may hover before a poet's incomplete, tentative lines and discipline his creation.

Unfortunately, Bergson employs the more difficult account, the mystical one which we mentioned first in order, when he raises creative process to cosmic application. This he does by showing how the processes of nature, even those manifesting inert order, may be related to a creative drive whose energy moves the whole world.

Bergson has recognized a tendency in nature that moves against creation toward absolute determinism, and in one place he speaks of absolute necessity in nature as if there were an actual absolute necessity in some phases of the concrete world.<sup>82</sup> This necessity is the reverse motion of creative process. It is manifest in the breakdown of vital compounds rather than in their synthesis. Bergson finds it in entropy, the inevitable loss of energy, which escapes as heat from chemical processes.<sup>83</sup> This downward movement surrenders to inert system.

Now, Bergson cannot mean that such determinism ever actually includes concrete histories, for the reason that he believes in the reciprocity or interpenetration of states of reality, as also in the fact that every point of extension is in relation to every other point and influenced by it.<sup>84</sup> Hence the indeterminate influence of contingent realms should dispel

<sup>82</sup> *Creative Evolution*, p. 248.

<sup>83</sup> *ibid.*, pp. 241 ff.

<sup>84</sup> *ibid.*, p. 188 and elsewhere.

absolute determinism in others. Determinism can be only approximate.<sup>85</sup> Even so this downward tendency is one against which creation must struggle. For the breakdown is a loss of vital energy and life can only continue through constant rebuttal of the surrender which it must constantly make.<sup>86</sup>

This counterstroke of the *élan vital* assumes cosmic significance when Bergson ascribes to it the laws of inanimate nature, and speaks as if they too were the ripples cast off by the creative surge. In these ripples creatures must live their lives. We are thus surrounded by many events of inert nature. This dissolution of creative tension has an analogy in the breakdown of any creative activity. Consider a poem apart from its esthetic concentration, as for example a child might read it. Here is order and system enough buried in the grammatical structure, the spelling of the words, etc. But here no creative system is apparent.<sup>87</sup> Objectify this relaxation to include natural processes and we would have orderly inert systems proceeding from creative process, and supplying the world with its vast cycles of regular behavior.

Existence is such that we must always face either creative or inert order.<sup>88</sup> There is no alternative. Our idea of disorder, our idea of noth-

<sup>85</sup> *ibid.*, p. 218.

<sup>86</sup> *ibid.*, p. 246.

<sup>87</sup> *ibid.*, p. 240.

<sup>88</sup> *ibid.*, p. 220.

<sup>87</sup> Compare with this the following passage from Bergson's most recent work:

"... Une tendance est la poussée d'une multiplicité indistincte, laquelle n'est d'ailleurs indistincte, et n'est multiplicité, que si on la considère rétrospectivement, quand des vues diverses prises après coup sur son indivision passée la composent avec les éléments qui ont été en réalité créés par son développement." (*Les deux sources de la Morale et de la Religion*, pp. 317-18.) Or, as expressed in an example. "La vérité est que réflexe et volontaire matérialisent deux vues possibles sur une activité primordiale, indivisible, qui n'était ni l'un ni l'autre, mais qui devient rétroactivement, par eux, les deux à la fois." From the point of view of the esthetic theory, we might, with a little goodwill, make something reasonable out of these passages. Otherwise they must remain subject to Santayana's criticism that Bergson allows multiplicity to arise out of nothing, or at least out of sheer simplicity. As the passage stands, this seems to be the case. From the esthetic point of view we may interpret the last passage quoted as follows: Two related functions, say reflex action and will, may have a common origin which, when we look back upon it, reveals that it is in a sense the same function as both the later ones which first attracted our interest. The original function represents the constitutive universal which in the plasticity of creation becomes reembodyed into new forms, both containing the original principle. This principle is of course reworked in creative transmutation as, let us say, Coleridge reembodyed the English ballad in his *Ancient Mariner*. When we look back upon the original function we can see "in" it or in logical connection with it both its offspring; before their appearance this would have been quite impossible as the old and the new are united by creative production. Nonetheless this passage really



ing, is derived from the experience of disappointment.<sup>39</sup> If we are looking for geometric structure and find poetry, we are disappointed and apt to condemn the poetry as chaotic. When we say a room is in disorder, we do not mean that a skilled detective might not discern from the position of the furniture or the presence of footprints on the carpet much of what had taken place in the room. We only mean that for household purposes, or from a certain esthetic approach the room is disorderly.

Thus suppress vital activity and we face inert order. Its appearance is automatic. Since this is the case we need not say that creative process derives its inert opposite from any inert matter. It is merely confronted with its own reflex. Now, this argument is at best a makeshift. It is really in harmony with neither of Bergson's interpretations of creation. (See below, p. 73.) The appearance of orderly system in a world of creative flux is left finally unaccounted for. We do not know what originates the reflex movement or dissolution. Further discussion will bring to light the background of this argument and contrast it with its more intelligible alternative.

belongs to Bergson's irrational philosophy, for the new functions are spoken of as views of a primordial and indivisible activity. This recalls his statement that all form or structure are no more than "views taken of an indivisible process."

<sup>39</sup> *Creative Evolution*, pp. 220 ff.

## CHAPTER II

### BERGSON'S CONFLICTING THEORIES OF CREATION

TWO quotations from *Creative Evolution* will introduce the opposed views which we have mentioned. The first is an expression of the esthetic view.

"Thus our personality shoots, grows and ripens without ceasing. Each of its moments is something new added to what was before. We may go further : it is not only something new, but something unforeseeable. Doubtless my present state is explained by what was in me and what was acting upon me a moment ago. In analyzing it, I should find no other elements. But even a superhuman intelligence would not have been able to foresee the simple indivisible form which gives to these purely abstract elements their concrete organization. For to foresee consists of projecting into the future what has been perceived in the past, or of imagining for a later time a new grouping, in a new order, of elements already perceived. But that which has never been perceived and which is at the same time simple, is necessarily unforeseeable."<sup>1</sup>

Here creation concentrates material, springing as it does from the past into the present as a simple moment of becoming, a simple form which grants to these abstract elements their unique organization. Here Bergson seems to develop his argument with the esthetic experience ever before him, an experience in which the fresh and the novel flourish, embodied in abstractions or the concepts of our experience, themselves anything but new.

But Bergson is not always willing to consider the development in creative series as a passage of abstractions into concretion, which is the esthetic interpretation of creation. Bergson deserts this view and denies that the creative process is really a synthesis of elements. The clearest repudiation of this position is to be found in a note devoted to M. Séailles's *Genius in Art*, a book which clearly reflects the theories of Ravaisson and Boutroux. Bergson writes :

"In his fine work . . . M. Séailles develops this twofold thesis, that art is a continuation of nature and that life is creation. We should willingly accept the second formula ; but by creation must we understand, as the

<sup>1</sup> *Creative Evolution*, p. 6.

author does, a synthesis of elements? Where the elements preexist, the synthesis that will be made is virtually given, being only one of the possible arrangements. This arrangement a superhuman intellect could have perceived in advance among all the possible ones that surround it. We hold, on the contrary, that in the domain of life the elements have no real and separate existence. They are manifold mental views of an indivisible process. And for that reason there is a radical contingency in progress, incommensurability between what goes before and what follows, in short, duration."<sup>2</sup>

In this note, Bergson makes two statements that are from our point of view remarkable. First, he denies that creation is a synthesis of elements. Now, are we to interpret Bergson as meaning here that creation is not a fusion of *abstract* elements? This, to be sure, conflicts with other passages. But there is, we suspect, a genuine conflict in Bergson's thought. Thus Séailles's meaning, which we shall examine below (see pp. 74, 75) the meaning to which Bergson has taken exception, leads us to believe that the latter here denies to creation even a fusion of abstractions. This is borne out by the rest of the passage quoted, in which elements are reduced to "mental view of an indivisible process."

To turn to the second point, when Bergson writes that in the domain of life elements have no real or separate existence, he would be correct if he meant no more than that elements in creation are not analogous to bodies of definite, unalterable structure, which can be fitted together as in a picture puzzle. But he goes further when he adds that they are manifold views of an indivisible process, for he implies that elements are only attributed by thought to life, or creation, which really does without them. This is the irrational interpretation of creation, and herein lies a confusion. The statement may be true of creation after the act of production, that is, the student or the critic who examines the product and interprets it may attribute properties to the esthetic product that are foreign to its history. Much analysis is subject to such distortion, ignoring as it does the individuality of the work in question. None the less, can we say that throughout the activity of creation itself, no elements appear save those that are mental views of an indivisible process? Most assuredly, we cannot. We do not create by means of mental views of our creation. Nor do we create through a prolonged flow of expression that is quite simple and indivisible in its content, that is without elements. This latter simplicity comes only as the culmination of the

<sup>2</sup> *Creative Evolution*, p. 29 n.

esthetic struggle. Creation passes from an isolation of elements which are to be embodied in an esthetic product to a fusion of those elements which are given fresh expression in the act. This is the essence of creation. Without it, creation has no essence and is incomprehensible, being itself subject to no analysis nor present in any scheme of analysis. This latter doctrine is the destination of Bergson's irrational trend, as we shall soon discover.

As we have seen, the irrational view centers in this assertion: The abstract elements which are remarkable in creative process must not be considered as constitutive of the activity by which the dynamic series prolongs itself. On this view, not only is the esthetic product simple and indivisible but also the entire process through which this product is originated is simple and indivisible as well. We use the word *irrational* to imply that in this phase of his thought Bergson sees fit to explain the world of systematic structure and regular articulation as an appearance, the result of the many views that are taken by the spirit of an absolutely indivisible process. Thus we employ the term *irrational* in much the sense that Royce attributes to the word *mystical* in *The World and the Individual*.

An important difference between the esthetic and the mystical interpretation lies in this: according to the first view it is possible to give a definition of the creative process, and indeed Bergson occasionally introduces definition or argues from definitions obviously implied;<sup>8</sup> but according to the second interpretation definition is quite impossible. Every attempt in this direction is bound to reduce the idea of free and spontaneous creation to a poor shadow of itself which the rationalist will have slight difficulty in dismissing.

It is obvious that the irrational view must result in such a denial of our ability to understand creation. If a definition involves relating a thing to other things and describing it in terms of the properties which it possesses in common with other objects, then it is quite impossible to define something that is throughout absolutely indivisible and unique. To be sure, this fact offers no reason for maintaining that the indefinable does not exist or that it can never be experienced intuitively. But we are compelled to renounce the indefinable as the metaphysical bulwark of a philosophy of freedom, or of any other philosophy, for we can abstract from it no intelligible content which might be adapted to any doctrine, such as for instance that of universal contingency. The irra-

<sup>8</sup> See below, p. 76, for an example.

tional interpretation gives us no evidence that we can consider in support of any sort of world-view. In fact, the one thing that we seem to know about duration and contingency from this point of view is that we have no reason to consider them as anything that may be related to our knowledge of things.

If we refer the irrational tendency of Bergson's thought to a general review of his philosophy, we shall find that certain passages stand in harmony with it, or even if really inconsistent with it, seem explicable in Bergson's thought with reference to it. Let us consider these aspects of his thought and contrast them where we can with assertions that are dominated by the rival hypothesis.

We find a different view of organization implied by the two theories. From the irrational approach, organization is not by any means the life of creation. Pure creation cannot be described as so amphibian a structure as organization, which is neither an inert mechanism nor a sheer moment of duration, enjoying its durational prerogatives. Pure creation or sheer untrammelled freedom is something else, and if we have caught the spirit of the irrational attitude we will not ask what this something else is. All that we can say is that pure duration is by no means limited or thwarted by necessity.

Necessity is, on Bergsonian principles, a sort of limit toward which matter tends to drag the creative reality, which in turn resists the attraction. Organization is the compromise which creation succeeds in making with matter. This doctrine is never clearly stated. It remains essentially metaphorical.

"In reality, life is a movement, materiality is the inverse movement, and each of these two movements is simple, the matter which forms a world being an undivided flux, and undivided also the life that runs through it, cutting out in it living beings all along the track. Of these two currents, the second runs counter to the first, but the first obtains, all the same, something from the second. There results between them a *modus vivendi*, which is organization."<sup>4</sup> Again on the following page, Bergson continues: "The impetus of life, of which we are speaking, consists in a need of creation. *It cannot create absolutely*, because, it is confronted with matter, that is to say with the movement that is the inverse of its own. But it seizes upon the matter, which is necessity itself, and strives to introduce into it the largest possible amount of indetermination and liberty."<sup>5</sup> The clause emphasized reveals Bergson's attitude. He

<sup>4</sup> *Creative Evolution*, pp. 249-50.

<sup>5</sup> *ibid.*, p. 251.

cannot believe that the actual world is creative process, it is rather a dilute extract of such process.

On this view, all structure, even of the vital and the organic pattern, is a detention of freedom, an encroachment of the inert upon the domain of the creative. We thus fall into the clutches of a Neo-Platonism: the soul is withheld from life and full enjoyment by the dull weight of the body which obscures its vision and drags upon its steps. We may go further and say that the soul exists despite the body! None the less, reflection will show us that Bergson is really honoring body and the animal organism by allowing it to possess the importance that it does. I think it is his reluctance to dismiss biological organization as sheer illusion that withholds him, when the irrational demon possesses his thinking, from reducing every moment of order and articulation to mere distortion of the real, which strict adherence to his doctrine should require. But this he will not do; he is too fascinated by the notion of life. But neither will he desert the irrational theory, at least not for the time being; he will not admit that duration has essential structure. And so he must describe pure duration or creation as disintegrating into differentiation of structure at the onslaught of necessity, and striving the while to repair the damage. This is the mystical origin of organization.

This generates a dualism in Bergson's account of world-process. The process of construction is manifest in the organic release of energy, rather than in the truly creative process by which energy is stored in living reservoirs. Intellect is more at home with destructive non-vital processes than with creative vital ones, whose power baffles its comprehension as does all creation which intellect can only falsify in apprehending.<sup>6</sup> None the less, does it not seem strange that but one side of nature should be a matter for accurate definition while the other is not subject to definite formulation? Is this not an arbitrary limitation of our ability to understand the world? A dogmatic assertion that what is not yet comprehended is by nature incomprehensible, when perhaps this baffling realm is baffling only because of its greater complexity? We need not deny that a vital tendency or direction exists in nature, but we may very well doubt that this tendency is such that it can only imperfectly be analyzed and never understood.

From this point of view, intellect and matter are cognate, both being generated by a detention of creation, a relaxation of creative energy similar to the relaxation of psychic *élan* which occurs when we cease to apprehend an esthetic object as a work of art or a thing of beauty and

<sup>6</sup> *ibid.*, p. 270.

survey only its commonplace aspects. Intellect is thus restricted thought and matter restricted process. Strange to say, this restriction emanates from creation, which thus unmakes itself.<sup>7</sup>

How different is the account of creation given in the first pages of the *Creative Evolution*! Here we have no formless reality, rather we find that organization is the life of duration whose creative surge is essentially organizing force, which fuses together a set of abstract patterns or possibilities of creation. This latter interpretation of vital or creative activity is expressed superbly in the essay on *Intellectual Effort*. Here organization is the essence of creation, not its compromise with matter.

"The author writing a novel, the dramatist creating his characters and situations, the musician composing a symphony, the poet composing an epic, all have in mind first of all something simple and abstract, something, so to say, incorporeal. For the musician or the poet it is a new impression, which they must unfold in sounds or in imagery. For the novelist and dramatist it is a theme to be developed into events, a feeling individual or social to be materialized in living personages. They start work with a scheme of the whole, and it is obtained when they reach a distinct image of the elements."<sup>8</sup>

Here creative process does not set itself against a material which it strives to overcome, rather it seeks material embodiment, and cannot be called successful until this is attained. "Pure" creation on this view would be nothing but the hypostatization of unsuccessful creation which fails to embody itself in products of definite form. Creative thought begins with a comparatively simple plan of procedure and plunges toward the concrete embodiment of this scheme in concrete imagery. This is the view of M. Séailles, rejected by the irrational Bergson but in all respects welcomed by the esthetic.

<sup>7</sup> *Creative Evolution*, pp. 199-206; see Ruggiero, *Modern Philosophy*, translated by Hannah and Collingwood, London, 1921, p. 179. Ruggiero notes that this difficulty is also scored by Aliotta.

<sup>8</sup> *Mind Energy*, translated by H. Wildon Carr, New York, 1920, p. 212. Compare LeRoy's interpretation of immediacy in his *Pensée Intuitive*, p. 141. LeRoy seems to have escaped the pitfalls of the irrational position:

"L'immédiat est atteint à propos d'un objet particulier, lorsqu'on a réussi à revivifier tout entière en acte l'opération de morcellage qui engendre cet objet; le donné immédiat correspondant n'est pas autre chose que le reste du réel, je veux dire ce qu'on n'a pas besoin de mobiliser ainsi pour résoudre le problème restreint qu'on a en vue, ce reste étant d'ailleurs considéré lui même du point de vue créé par le morcellage en cause."

Immediacy is, then, not a temporal starting point, nor is it to be seen without a point of view, which of course introduces conceptual elements into the activity of apprehension.

"Thus the work of art is created by the free movement of life, which organizes ideas and images into harmonious form, all of whose elements are in reciprocal relation (se répondent à) with one another and with the dominant idea which coordinates them."<sup>9</sup> The dominant idea is the *motif*, the *idée maîtresse* of Ravaisson.

On the esthetic view concepts possess a reality *ante rem* as well as *post rem*. Otherwise duration cannot be described as activity or as production. Indeed it cannot be described as anything but the inexplicable appearance of something that seems unique. From the irrational approach there is no intelligible operation described by which creation comes about. It is a bit of supernatural pyrotechnics. And this indeed it seems when from the mystic point of view Bergson describes freedom.<sup>10</sup>

"... At the very minute when the act is going to be performed something may revolt against it. It is the deep-seated self rushing up to the surface. It is the outer crust (of intellectual thought) bursting, suddenly giving away to an irresistible thrust. Hence in the depths of the self, below this most reasonable pondering over most reasonable pieces of advice, something else was going on—a gradual heating and a sudden boiling over of feelings and ideas, not unperceived, but rather unnoticed. . . . We wish to know the reason why we have made up our mind and we find that we have decided without any reason. But in certain cases that is the best of reasons. For the action that has been performed does not then express some superficial idea, almost external to ourselves, distinct and easy to account for; it agrees with the whole of our most intimate feelings, thoughts and aspirations, with that particular conception of life that is the equivalent of all our past experience. . . . It is at the great and solemn crisis, decisive of our reputation with others, and yet more with ourselves, that we choose in defiance of what is conventionally called a motive, and this absence of any tangible reason is the more striking the deeper our freedom goes." Again in *Creative Evolution* a similar thought makes its appearance. "But in speaking of a progress toward vision, are we not coming back to the old notion of finality? It would be so undoubtedly, if the progress required the consciousness or unconscious idea of an end to be attained. But it is really effected in virtue of the original impetus of life; it is implied in the movement itself."<sup>11</sup>

In the latter passage, Bergson has reason to deny finalism, the doctrine which explains telic action as movement along an eternal plan. But from

<sup>9</sup> *Le Génie dans l'Art*, Paris, 1883, p. 170.

<sup>10</sup> From Bergson's *Time and Free Will*, p. 170. By permission of The Macmillan Company, publishers.

<sup>11</sup> *Creative Evolution*, p. 96.



this it does not follow that we must renounce all idea of end, and reduce creative process to what seems perilously near to mere impulse. But even so, these statements are not without real insight. As Bergson maintains in the first passage quoted, creative action and decision do often dismiss conventional notions. And they do at times appear suddenly. But such decision must go hand in hand with reflection and judgment, and its relation to these must be shown explicitly. As M. Séailles writes:

"While the work of art is forming itself in the spirit, reflection watches its birth and growth. While effacing itself, in order not to substitute its own impotence for the power of life, which alone gives life, it accompanies the work, follows its successive phases; it intervenes incessantly; it plays with what is offered, judges it, criticizes. Thus reflection prevents the birth or the endurance of monstrosities."<sup>12</sup>

To be contrasted with the catastrophic outburst of novelty above described, is Bergson's saner account of creative life as a matter of effort, a state of psychic elevation which we can only maintain as an act of will. Concentration of our past experience, of the impressions of past sensitivity, requires a real tension of the spirit. Once this is relaxed we sink into disorganization and automatism. Such effort is described at some length in the essay on *Intellectual Effort*. It is involved in passage from the more abstract to the more concrete, when we try to fuse a new "manner of go" or organization into unformed habits, whether these be our customary habits of discourse, or types of bodily movement, our habitual physical equipment.<sup>13</sup>

The rôle played by "being," to use the Platonic term, in creative process differs according to the interpretation in question. From the irrational approach as we have seen, creation is quite apart from being. It is in no sense contaminated with any definite structure. It is indeed doubtful that the irrational duration can be differentiated so far as to allow any enduring structure such as, for example, personal identity. However the past, the dead body of once living duration, is not necessarily so alogical and structureless. Bergson sometimes speaks as if in the "finished product" we face a determinism comparable to that of an eternal being, where each moment is what it is necessarily by virtue of its position in the whole.<sup>14</sup> But here Bergson is clearly in error and inconsistent. A past contingency does not become a necessity simply because it is past; its relation to its antecedent conditions is as contingent

<sup>12</sup> *Le Génie dans l'Art*, p. 170.

<sup>13</sup> *Mind Energy*, p. 216, circa.

<sup>14</sup> See for example *Creative Evolution*, p. 200.

as ever in the sense that its entrance upon the scene of the concrete cannot be predicted with reference to its antecedent conditions. Such a past event is necessary only by virtue of its brute existence, which memory has difficulty in denying. To be sure, in the past we will find a definite organization which is denied to the future of a creative series. But this definite structure exists as such only because it has been so created in the contingent process.

Now, this relegation of being to the past is indeed but shabby treatment to offer so time-honored a concept as the Platonic Form. And in so doing, Bergson ignores its true importance. For being was not for Plato merely orderly structure, it was also a vehicle of power.<sup>15</sup> Hence we cannot say that we do justice to the concept if we dismiss it from creation without considering whether or no creation is really possible if entirely removed from it. I think we shall, as regards the last question, conclude in the negative. We have already noticed that Bergson at times considers creation as a fusion of elements. In his treatment of memory we shall find that being is reinstated in the guise of patterns of activity and that in this way being is introduced into becoming.

On the esthetic theory, it is memory or, in nature, something akin to memory that supplies the means by which order is generated in creative process. It is through memory that pervasive structure is maintained. It is thus memory that withholds contingency from sinking into brute caprice. So intelligent purpose is made possible. Interpreting memory from this point of view, Bergson has reached a novel conclusion concerning its nature.<sup>16</sup> Memory is not a store of images which are called to consciousness by means of association. Rather it is a manual of action, an index, whose contents must, however, be interpreted, of methods of procedure upon which practise must depend for material. Thought is always to some degree conative and hence it preserves not a collection of snapshots to illustrate its past but an arsenal of weapons to insure its future. To be sure, every memory as it enters consciousness is clothed in imagery. But the image is chosen by memory itself and serves to link it with present perceptions or memories previously recalled. Pure memory is imageless or free from any given image. It is a plan of action that we have developed in the past. It is clothed in imagery only as we seek to employ it.

The gulf between memory and perception Bergson indicates by referring to the phenomena of psychic blindness, pathological states in

<sup>15</sup> *Sophist*, 247.

<sup>16</sup> *Matter and Memory*, Chaps. II and III.

which memory fails to be of use in actual practise, although the patient may be able to recall spontaneously the required information. For instance, a subject may be able to give an adequate description of a room in which he is incapable of finding his way, even though his senses are intact. The failure of recognition, that is, of the union of memory and perception, has been explained in terms of the associationist psychology as the result of imperfect connection between the brain areas of sensation and those wherein sense images are stored. The adherents of this theory were committed to the hypothesis that memory or imagination is decaying sense. For them a memory image was a less vivid counterpart of its original. This hypothesis Bergson rejects. If memory is of this sort why do we not mistake a faint noise in the present for a loud one heard in the past? And again, how is it that we recognize a sensed image as the counterpart of a memory? The two are certainly not precisely alike. Consider our reception of a sentence spoken in a language with which we are not familiar. The speech is recognized, the sounds interpreted as coherent meaning. Yet surely the accent, the qualities of the voice which one speaker employs differ markedly from those of another. And yet we recognize the words.

Recognition is, then, not a simple matter: it is really interpretation, a relation of our present to our past by means of which we acquire an attitude toward the future. The act of memory is a selection from our past of habits useful in the present situation. For instance, upon the flow of sound that we are to interpret as speech, we bring to bear our past responses to the words employed. These we adapt to the occasion in order to construct a continuous intelligible meaning that we may attribute to the speaker.

Thus we associate not only in terms of images but of situations. This is supported by the fact that a word in one tongue possessing a different meaning in another is not in actual conversation or reading confused with its foreign meaning. The criterion of our selection of an appropriate meaning is the pattern of our mental action in face of the given situation. This links us to some past experience, mental activity with regard to which was in some respects the same as that which we are about to initiate. From the past we may recover valuable material for the completion of our course of action.

This pattern of activity is of course abstract, and must be brought into contact with the concrete situation through ingenuity of application. This operation may occur with amazing rapidity. Consider, for example, the agility with which, say in repartee or even in conversa-

tion, we draw words and phrases to fit our "intended" meaning. This requires not only embodiment of patterns in imagery, but also the freeing of these patterns from irrelevant imagery. Memories must, so to speak, be stripped for action as they are rendered applicable to our needs.

Our choice of action pattern to be followed or scheme of meaning to be embodied has a contingent element in its operation. We must proceed to some measure through trial and chance acting now on one suggestion, now on another. These suggestions have a partially arbitrary origin. Selection, of course, discards many useless ones, but even so the mind is often confronted by a confusing irrelevance which it must recognize as such and discard. The mind is thus often at the mercy of suggestion, waiting impatiently at the beck and call of the irrelevant, which may at times appear under a specious disguise. In such cases memory is dependent upon association more obviously than is usual and must await fortunate suggestion from association by resemblance, contiguity, or of habitual memory, the repetition of memorized series in order. Bergson has not emphasized the true importance of suggestion, but in two places at least he has clearly used the term in the sense above given. Without such suggestion, action patterns cannot come into contact with actual situations. (See below, pp. 92, 140 ff.)

" . . . The generative idea of a poem is developed in thousands of imaginations which are materialized in phrases that spread themselves out into words. And the more we descend from the motionless idea, wound on itself, to the words that unwind it, the more room is left for contingency and choice. Other metaphors called up by other words might have arisen; an image is called up by an image, a word by a word."<sup>17</sup>

The sphere of creation is limited by habit, which we employ gladly as it frees us from too minute attention to every motion or expression. Through habit, we do not recall the past; we act it. Habits and memorized series of words or acts give us in operation no inkling of their origin once they are thoroughly mastered. They have lost their reference to our past and become ready-made equipment for the present, which we can bring into employment at will.

The lieutenant of memory is obviously intellect, and in Bergson's theory the two work together. Analysis breaks the content of our experience into phases which can endure in memory and come forward for use. Not only does analysis supply memory with material, but memory makes analysis possible. When we break a moment of experience into its

<sup>17</sup> *Creative Evolution*, p. 320; see also *Mind Energy*, p. 210.

elements, we are recognizing as embodied in that whole structures already encountered. Memory and intellectual analysis thus work hand in hand, the one at a loss without the other.<sup>18</sup>

So we find memory the fundamental function of thought. Both esthetic activity and intellectual analysis are subordinated to it. This is very significant as it indicates that intellect and intuition, or esthetic activity, which is involved in all interpretation, cannot be absolutely separated. Bergson has treated recognition of words in conversation as a matter of interpretation through which the meaning of what has already been said suggests possible interpretations which seek embodiment in our understanding of the spoken words. Here surely the so-called intellectual abstraction and ignoring of superfluous quality assumes an esthetic aspect.

Further, we find when we consider the importance of memory in creative activity that creative process involves abstractions and works them toward concrete embodiment. To be sure, memory is plastic in process. Our solution of a problem always goes beyond and often transforms the patterns of action chosen, but this does not alter the fact that memory operates through the employment of schemes which possess a conceptual universality of application, even though in every instance some special mode of application may be necessary.

Here we have the nucleus of the esthetic theory of creation, according to which conceptual patterns are employed in the making of becoming. These patterns are clearly more than "views taken by mind of an indivisible process."

The relevance of intelligence to esthetic production is in his latest book again admitted by Bergson. To be sure, he insists that the full esthetic experience is more than intellectual and this we hasten to admit—an organic whole is more than the juxtaposition of its parts. Bergson writes of a super-intellectual emotion. This is to be distinguished from an infra-intellectual emotion which is no more than an "agitation following upon a representation." The super-intellectual emotion "precedes the idea and is more than idea, but [it] expands into ideas if it wishes, being pure soul, to possess a body."<sup>19</sup> This seems to be the *dominant idea* of Ravaisson, Boutroux, and S  ailles, the first "conception" of a work of art.

However, Bergson is not, in his latest book, free from the irrational philosophy. In the fascinating discussion of philosophical mysticism

<sup>18</sup> *Matter and Memory*, pp. 206-8.

<sup>19</sup> *Les deux Sources*, etc., p. 270.

which occurs in the third chapter of this work, he has drawn a distinction which comes very close to stating the difference between the esthetic and the irrational views of creation. An artist may achieve the intuitive level by struggling with his medium and his plan of procedure, choosing, discriminating, discarding until finally he attains a point where discrimination is no longer mere discrimination, where he finds acceptance or refusal of his work spontaneously obvious. In such an experience, esthetic quality is grasped and the whole "judged" all at once. Now, when Bergson introduces his distinction between the two forms of esthetic production, he maintains that the process above described need not occur, that the author may find his words springing spontaneously from indivisible emotion.<sup>20</sup> This may refer only to very rapid composition, such as occurs in convivial conversation where the search for the *mot juste*, its contemplation and approval occur in a moment or to one of the phenomena of "possession" wherein writing seems automatic. But Bergson does not so interpret it and thus he retreats into the irrational philosophy. It is important to notice that he considers the second type of production the more significant in describing cosmic creation.<sup>21</sup>

It is interesting to notice that Bergson, when describing the growth of a poem, speaks of its *generative* idea, thus suggesting that the idea, the first vision of what is to be embodied, is the active source which produces the embodiment, is really the creator. Ideas seem to "express themselves." Often the attitude of the artist is, at least, at the start one of "wise passiveness." The effort which supports creation is one of attention, holding the mind before a given field, and allowing ideas to come in contact one with another until the generative notion finds satisfying embodiment.

" . . . Man's faculty of creation, rare in him  
and not at his command, is but Nature herself,  
who danceth in her garden at the blossoming-time  
'mong the flowers of her setting; and tho' true it be  
that Art needeth as full devotion and diligence  
in the performance as doth Virtue, yet i' the mind  
of the artist Nature's method surely is on this wise;—  
the Ideas which thru' the senses hav found harborage,  
being come to mortal conscience work-out of themselves  
their right coordinations and, creatively  
seeking expression, draw their natural imagery

<sup>20</sup> *ibid.*, p. 272.

<sup>21</sup> *ibid.*, p. 273.

from the same sensuous forms whereby they found entrance;  
thus linking up with the long tradition of Art.

The manner of this magic is purest in Musick,  
but by the learner is seen more clearly in poetry,  
wherein each verbal symbol exposeth its idea,  
so that 'tis manifest by what promptings of thought  
the imaginativ landscape is built and composed,  
and how horizon'd: And the secret of a poem  
lieth in this intimat echo of the poet's life."

(*Testament of Beauty*, IV, 974-93.)

Of the arena of such activity Bridges writes as follows, mentioning

"... thatt swarming intelligence where life began,  
and where ideas wander at liberty to find  
their procreative fellowship; thatt fluid sea  
in which all problems, spiritual or logical,  
aesthetic, mathematic or practic, resolve,  
melting as icebergs launched on the warm ocean stream:  
and whereso'er this corporat alchemy is at best  
'tis call'd by all men Genius."

(IV, 816-24.)

The philosophy of Bergson has been severely criticized. The most trenchant of these criticisms are not to be answered from the irrational point of view, although they present no difficulty when viewed from the esthetic. Those who claim that Bergson has betrayed reason and surrendered his philosophy to the mercies of an inarticulate insight are those who see only his irrational side. None the less the criticisms which these writers advanced reveal the fatal weakness of the irrational theory.

There is the objection already mentioned above, which is expressed at some length by Mr. McKellar Stewart.<sup>22</sup> It runs as follows: Bergson has forfeited the right to claim any philosophical texture for his thought. The reality which he considers the justification of his assertions justifies no assertions and stands aloof from all predication. Stewart writes that since duration is beyond all determination recognized by thought we have no right to predicate of it an outcome of thinking, or any structure developed in thought. Why then should we call our life in duration a life of freedom? Why indeed call it anything?

<sup>22</sup> J. M'K. Stewart, *Critical Exposition of Bergson's Philosophy*, London, 1911, pp. 248 ff.

This argument is significant in that it quite undermines the spiritual value of the mystic interpretation of creation. We are left with no doctrine that explains man's power of initiative, for we are left with no doctrine applicable to the realm of common experience.

Another very similar attack<sup>23</sup> undermines Bergson's right to a philosophy by denouncing intuition as an organ of philosophical research. Intuition reveals an immediate which cannot be universalized and related to other aspects of reality, for the reason that intuition, the mystic intuition, makes no use of categories or classes, by means of which its content may be applied beyond the immediately perceived. How then can we make of this immediate a universal character of all things?

This theme has been further developed by Santayana and Lovejoy,<sup>24</sup> and the most precious element of Bergson's thought, humanly speaking, has been denied him as unsupported by the immediate of which he writes. These critics would deny the application even of the term "duration" to a sheerly immediate, undifferentiated object. Santayana, writing in this vein, prophesies the return of many Bergsonians to a more conventional form of mysticism, in which the unforeseeable aspect of things will be surrendered along with all other categories, reality being interpreted as one flash of immediacy. Santayana continues:

"A real fluidity and an absolute immediacy are not compatible. To believe in real change you must put some trust in representation, and if you must posit a real past and a real future you must posit independent objects. [Perhaps Santayana's realism is too much in evidence here, why not merely "distinct objects"?] In absolute immediacy, on the contrary, instead of change being taken realistically, you can have only a feeling of change. The flux becomes an idea in the absolute, like the image of a moving spiral always moving outwards and inwards but in its center and circumference always immovable. Duration, we must remember, is simply the sense of lasting; no time is real that is not lived through. Therefore various lives cannot be dated in a common time, but have no temporal relations to one another. Thus, if we insist on immediacy, the vaunted novelty of the future and the inestimable freedom of life threaten to become (like all else) the given feeling of novelty or free-

<sup>23</sup> C. A. Teodorescu, *Die Erkenntnislehre Bergsons*, Jena, 1914, p. 42; R. Kroner, *Logos*, 1910, Band I, S. 148.

<sup>24</sup> A. O. Lovejoy, "The Problem of Time in Recent French Philosophy," *Philosophical Review*, Vol. 21, p. 327.



dom, in passing from a given image of the past to a given image of the future—all these terms being contained in the present, and we have returned to the familiar conception of absolute immutability in absolute life.”<sup>25</sup>

In the last sentence, I suspect that Santayana oversteps himself. By rights, the mystical Bergson cannot rest on the summits of even the most mystical absolutism. The divorce between intelligence and will which his philosophy asserts banishes him from such a realm. An absolute may after all be apprehended through itself, and this appearance will reveal, if not a fulfilled purpose, then at least a vast network of order splendid in its logical perfection. But this is not so when we contemplate the monster of Bergson’s thought. Indeed it is fortunate that we have no cause to consider this brute as temporal or developing, for if we did, a most discouraging ogre we would have to make of him; a hurrying time-spirit, blind and irresponsible without conscious purpose or direction. In fact, we could not speak of evolution at all. Watts Cunningham writes thus of the mystical evolution:

“A process which is turned toward the impalpable void, which knows no leading and seeks no end, would . . . be no process at all.”<sup>26</sup>

There is another type of attack which proves equally successful against the irrational interpretation of becoming. M. Delbos challenges a central point when he questions Bergson’s right to prefer an intuited flux to an intellectual structure. Why, after all, put faith in one and not in the other? Bergson has suggested that to suspect the reality of a flux immediately grasped is only a philosopher’s fancy.<sup>27</sup> No one but a philosopher would go to so outlandish an extreme. But, as Delbos suggests,<sup>28</sup> one purpose of philosophy is to evaluate the manifold evidence concerning the nature of reality that we encounter in our experience. It is thus philosophy’s office to doubt and to seek and criticize possible grounds for doubt. From this point of view it may well be intuition that is at fault and not intelligence. The objects of intuition may be the distorted ones and becoming may be only a garbled being. To assert the opposite may be only the outcome of a very marked prejudice against the intellect, which is after all the only aspect of our cognition in which some

<sup>25</sup> *Winds of Doctrine*, pp. 97-8.

<sup>26</sup> G. W. Cunningham, *A Study in the Philosophy of Bergson*, New York, 1916, p. 160.

<sup>27</sup> *Matter and Memory*, p. 207.

<sup>28</sup> V. Delbos, *Revue de Metaphysique et de Morale*, Tome V, 1897, pp. 353-89.

thinkers, notably Plato and Descartes, have found any clarity or trustworthiness. Once we face the situation in this light, what right have we to prefer becoming, or immediately perceived flux, to being? (See above, p. 60.)

A further quotation from Santayana will indicate how serious a preferential judgment has been made against intellectual structure. Santayana attacks in the interests of cosmology rather than in those of theory of knowledge. He refuses to accept as anything but arrant dogmatism the assertion that the exquisitely articulated system which our science discovers can be the outcome of an undifferentiated simplicity. He writes:

"Herbert Spencer says somewhere that the yolk of an egg is homogeneous, the highly heterogeneous bird being differentiated in it by the law of evolution. . . . Leibniz, on the contrary, maintained that the organization of nature was infinitely deep, every part consisting of an endless number of discrete elements. Here we may observe the difference between good philosophy and bad. The idea of Leibniz is speculative and far outruns the evidence, but it is speculative in a well advised, penetrating, humble and noble fashion; while the idea of Spencer is foolishly dogmatic, it is a piece of ignorant self-sufficiency, like that insular empiricism that would deny that Chinamen were real until it had actually seen them. Nature is richer than experience and wider than divination; and it is far rasher and more arrogant to declare that any part of nature is simple than to suggest a sort of complexity that perhaps it might have. M. Bergson, however, is on the side of Spencer. After studiously examining the egg on every side, and considering the source and destiny of it, he would summon his intuition to penetrate to the very heart of it, to its spirit, and then he would declare that this spirit was a vital momentum without parts and without ideas and was simplicity itself. He would then add that it was the free and original creator of the bird, because it is the essence of spirit to bestow more than it possesses and to build better than it knows." Whereupon Santayana concludes, "Doubtless new things are always arising, new islands, new persons, new philosophies; but that the real cause of them should be simpler than they, that their Creator, if I may use the language, should be ignorant and give more than he has, who can stomach that?"<sup>29</sup>

These arguments all refer to the mystical theory of creation. They all presuppose that patterns of creation or plans of procedure are foreign to

<sup>29</sup> *Winds of Doctrine*, pp. 89-90.

creative process. I think the arguments are sound in so far as they go. But there can be no doubt that they fail to consider the alternative interpretation. None of them has considered creation as a fusion of elements, all have emphasized its immediate simplicity. This is somewhat surprising when we reflect that in so prominent a discussion as his doctrine of memory, Bergson has committed himself to the esthetic interpretation. But Bergson's confusion of the two points of view has obscured his meaning and resulted in much misunderstanding. The writers whom we have mentioned above are but a few of the many who have questioned Bergson's position, but their arguments are typical of the whole group.

### CHAPTER III

## RESOLUTION OF THE CONFLICT

#### I

THE mystical theory has been shown to be inadequate. If we wish to find any assistance in Bergson's thought toward framing a reasonable account of reality, we must turn to the esthetic view. We shall find, however, that Bergson's philosophy must be altered if this is to become possible. For Bergson has built much of his philosophy upon mystical tenets. There are, then, two doctrines that we must refute: One, that if creation is a fusion of elements it is really subject to determinist principles; and two, that it is impossible to conceive of things save under determinist categories. Once these dogmas are cleared away and saner principles put in their place, we shall see the true significance of the esthetic theory of creation.

Let us consider the first point. In his note on Séailles's work, Bergson writes:

"... By creation must we understand, as the author does, a synthesis of elements? Where the elements preexist, the synthesis that will be made is virtually given, being only one of the possible arrangements. This arrangement a superhuman intellect could have perceived in advance among all the possible ones that surround it."<sup>1</sup>

Now, if it is true that to admit elements into creative process is to surrender to determinism, Bergson has reason to avoid Séailles's position, for to accept it would amount to surrendering the temporal plasticity of his universe. But on the other hand, if he retains his criticism of Séailles, Bergson has unwittingly undermined the only clear account of creation that he has written and thus given himself unarmed into the hands of his critics, who may assert that this statement commits Bergson to renounce the freedom and contingency described in his elaborate account of esthetic creation.

Let us examine further Bergson's criticism of Séailles's theory. We must begin by distinguishing between two kinds of elements, constitutive and material. Bergson does not employ the terms but we shall find them useful in discussing his position. Constitutive elements are the abstract patterns which are employed in creative activity and drawn

<sup>1</sup> *Creative Evolution*, p. 29 n.

together into harmonious union. They are not fully determined as regards their relation to other constitutive elements nor as regards their precise concrete embodiment until full creation has taken place, and a concretion has been achieved.

Consider the relation of the pattern of blank verse to the pattern of lyric poetry and we realize at once the indetermination that is inseparable from such a connection. This indetermination can only be overcome by a process of creation which unites the two, viz. the composition of a lyric poem in unrhymed iambic pentameter. Constitutive elements are thus plastic in that they may be worked together in an indefinite number of ways. All this is true even of constitutive elements containing inert series, like an elaborate architectonic which an author endeavors to weave into his text. The precision of this order governs creation only as final cause, creative activity striving to produce a concrete product which will embody this inert series. Material elements, however, lack this plasticity. They are not subject to development, for they are the terms that appear in the inert series. An example of Bergson's will help us distinguish between the two.

"When a poet reads me his verses, I can interest myself enough in him to enter into his thought, put myself into his feeling, live over again the simple state he has broken into phrases and words. I sympathize then with his inspiration, I follow it with a continuous movement which is, like the inspiration itself, an undivided act. Now, I need only relax my attention, let go the tension that there is in me, for the sounds, hitherto swallowed up in the sense to appear to me distinctly, one by one in their materiality. . . . In proportion as I let myself go, the successive sounds will become the more individualized, as the phrases are broken into words so the words will scan in syllables which I shall perceive one after another. Let me go still further in the direction of dream; the letters themselves will become loose and will be seen to dance along, hand in hand on some fantastic sheet of paper. I shall then admire the precision of the interweavings, the marvellous order of the procession, the exact insertion of the letters into the syllables, of syllables into the words and the words into the sentences. The further I pursue this quite negative direction of relaxation the more extension and complexity I shall create; and the more admirable will be the order that seems to reign undisturbed among the elements."<sup>2</sup> (Here we have Bergson in his mystical mood in so far as he maintains that all distinguishable elements are extracted from sheer duration and represent nothing positive.)

<sup>2</sup> *Creative Evolution*, p. 209.

The elements here described are the material, words, syllables, and even letters into which the constitutive elements, the generative ideas of meaning to be expressed and schemes of form to be employed, may be broken down. Material elements are derived, according to accepted rules and conventions, from duration which has arisen from a fusion of constitutive elements. This does not render material elements arbitrary, for they depend for their arrangement upon the nature of the duration in question. *None the less, they do reveal creation in a manner which ignores its history and telic development.*

We may describe material elements in two ways. First, we have in science the distinctly recognizable, comparatively simple objects of experience which lend themselves to the ingenuity of the observer who discovers relations between them. Thus bodies with their recorded weights and spatial and temporal measurements, concrete instances of color, odor, etc., are such material elements, or at least may be treated as material elements. These material elements supply terms for measurement and classification that are carried on without reference to any purpose initiating their existence. For instance, Descartes's eagerness to assure the possibility of a homogeneous spatial extension and its primary mathematical qualities was perhaps because of the fact that the new physics needed such entities of spatial nature as material elements in its calculations. Hence Descartes strove to describe them as clearly evident to mind.

The second type of material elements are the terms to be found in the inert series that is not embodied in concrete creative achievement, or in the actual concrete world. These elements might be described as precreational. They are the terms of the inert series that are held in mind as possibilities or requisites of the creation in progress. These terms aid creation by giving expression to the unembodied series that must be held in mind. Thus a poet's schematic presentment of meter—perhaps a singsong of nonsense syllables—would contain such elements.

Material elements link the situations in which they stand to the past and future according to the principles of transeunt or efficient cause. Series of material elements may be observed to pass through a number of situations, that, from the teleological point of view which reveals constitutive universals, are clearly distinct one from another. Thus material elements do not reveal the telic origin and justification of the movements of creation in which they are embodied. They do reveal the way in which these modes of embodiment are woven together in the concrete. Material elements have to do with what Whitehead has called

the morphological as opposed to the genetic aspect of reality. (See below, p. 141.)

Spatial structure may indeed be the most prominent characteristic of material elements considered as an interrelated class. We shall find later that Whitehead has interpreted spatial form as the most general principle of the realm of concrete togetherness—of the morphological realm above-mentioned. To be sure, a constitutive universal *ante rem* may contain within itself spatial pattern relevant to its members, but it need not be spatially related to other universals.

Creation, then, does not proceed in terms of material elements; no more do I compose these lines letter by letter, or even word by word, but through a growing embodiment of original scheme in grammatical English phraseology. Creation is not mere arrangement or rearrangement of parts, precisely because constitutive elements are unlike material elements, which are not in the least plastic, being limited to definite units of recognition. A group of constitutive elements drawn into material union assumes a more and more definite organization, which in completed creation finally takes on concrete existence and final coherence of structure. But despite this final coherence, it is quite impossible to foresee exhaustively the structure of a product by enumerating the various constitutive elements which were contemplated as possible ingredients, and then by considering all possible combinations of these. This is because there exists, prior to creation, no given scheme in which we could fit all these elements together. It is not a matter of piecing together a jigsaw puzzle into a spatial whole, for the elements in question have not attained their full concrete embodiment and will not until production is complete. Thus the system of their harmonious union is not foreseen in its coherent form but merely postulated as an end to be attained, a final term whose nature is unknown, albeit we may be acquainted with certain characteristics which we hope successfully to weave into the system.

So, when Bergson asserts that if creation be a synthesis of elements, creative activity can be reduced to an "arrangement" of parts, he must be thinking of material elements. For the constitutive have no concrete, determinate structure until creation is complete, and hence could not possibly be "arranged." Rather they must be fused together and this involves creation.

Now, suppose a superhuman intelligence that faced all possible combinations of certain material units—let us say of English words and punctuation marks. All possible texts of English composition, along

with an enormous heap of nonsense would be materially before him—yet not one poem, novel, or essay would there be before him, not one image or plot or idea! In order that these combinations of words be judged for their meaning, and those of them recognized as compositions that possess significance, intelligence must read and interpret them, judging whether or no they might be classed as embodiment of meaning. This task would be one of wit and constructive thinking. Consider the fine judgment necessary to distinguish by reference solely to meaning between what seemed a good translation of the *Critique of Pure Reason*—and there would be many that might pass as such—and one that in places failed to convey any coherent meaning, of which class there would be of course an innumerable host. Indeed, foresight by means of material elements is nothing at all unless the combinations be interpreted. But interpretation is itself an act subject to the conditions of esthetic insight. It is indeed creative in so far as paraphrase is essential to interpretation.

Creation has been described as a synthesis of elements by A. N. Whitehead in his philosophy of organism. The elements are, however, eternal patterns, not concretions, although Whitehead insists that the continuity of nature is preserved by the fact that new concretions must dovetail with or conform to previous productions. Whitehead also describes the subsistence of a hierarchy of possibility built up as a combination of the elements of potentiality. However, this structure of possibility, although unfathomable in its wealth is itself purely conceptual, i.e. it is deficient in actuality. From this it is evident that for Whitehead creative production is more than a mere selection and approval of possibilities. The plunge of possibility into concretion requires acts of decision that cannot be solved by mere contemplation of logical patterns. The realm of subsistence is like a scheme of possible plots contemplated by an ideally perfect master of the technique of fiction. This structure is related to the ever-changing swirl of creative production as schematic plans are related to final achievements. (See below, p. 136.)

We have found, then, that we have nothing to fear from the specter of prediction through material elements. Let us now investigate, as thoroughly as we can, an important point closely related to the above, the place of contingency in creation, in genuine creation which employs constitutive elements. There seems clearly to be some sort of contingency here, for structure and organization come to be through the creative act and are not the cause or ground thereof. Without relying upon



some definite structure or order we cannot predict future order. This is clear enough. But how are we to describe this contingency and how relate it to the birth of the close-knit structure which the esthetic product possesses? We must remember that we are in danger of incurring the rationalist criticism that we conjure order out of chaos.

Bergson has said in an unguarded moment that there is no disorder or contingency.<sup>3</sup> Our apprehension of such a pseudo-entity is only a matter of disappointment, occasioned by the fact that we expected either inert or creative system and have discovered the other. On these grounds then must we say that we have only a confused notion of creative contingency? Is it really inert system suddenly perceived as underlying the collapse of creative process? If so, is the contingency real, is it not rather an idea resulting from our imperfect knowledge of creative process and its ways? We are not eager to admit such a doctrine. Yet how are we to avoid a similar statement, if we admit that contingency in creation is only a sudden passage into inert order?

We must admit that Bergson is right. Contingency is as he describes it or it is something so mysterious that we can never describe it. But when we say that creative process in some way depends upon inert system, we must carefully explain our meaning. Contingent creative process does not depend upon the structure which it is fashioning. The explanation of the contingency must lie in the working of the creative mind.

Consider the association of ideas, for which there are rules to be formulated. A creative mind turns upon its past to draw forth patterns for discourse or action. It is at the mercy of the ideas that occur to it; creation as we have already noted awaits suggestion and cannot do entirely without it. This turning to suggestion is contingent from the point of view of the creator.<sup>4</sup> Still, it is quite orderly according to whatever system determines the order of the association which preserves contact between the various patterns of procedure in memory.

These contingencies supply us only with external transit from image to image, a transit in which we often go astray, confused among inessentials. When we come upon a possible organization of patterns we must judge and accept or reject it. Here interpretation is necessary and a creative process must be initiated.

Association cannot reveal plans of action. It can only carry the mind's attention to realms wherein insight may discern something of value for creation's purposes. This latter grasp of the situation is

<sup>3</sup> *Creative Evolution*, pp. 220 ff.

<sup>4</sup> cf. Ravaisson, *De l'Habitude*, Baruzi's edition, Paris, 1927, p. 59.

aesthetic, as we have said. Hence prediction in terms of association patterns could never carry the "calculator" beyond the fact that certain realms of past experience were to be traversed and searched for suggestion. This might conceivably be foreseen in terms of a scheme of prediction according to which a certain realm of experience might be recognized as associable with another in a given mental situation, association being more precisely understood than it is in our present psychology. (Of course, we do not suppose that for cosmic creation the principles of associative suggestion are similar to those that hold sway in our own thinking. It is quite conceivable that principles of association present in cosmic creation are similar to what we would term logical principles of methodology rather than "laws of association." Principles that to us seem *de jure*, principles that we must make an effort to employ, may be no more than *de facto* modes of procedure for the divine mind.) But even so the discovery of significant material could not be predicted. To predict creative activity *in toto* and so foresee the actual concrete embodiment would require that all the patterns involved be foreseen as well as the final mode of their compresence in production. But as Bergson has argued, to foresee so completely would be to perform the act of creation itself. It would not be foresight but actual production. Now, if we wish to argue that God so foresees the world process, well and good. That act of complete foresight is identical with His act of creation. And we are back where we started with a creation that cannot be foreseen in advance of its productive activity. This creation is the life of duration.

Many thinkers, even some Bergsonians, hold that such creations may occur, so to speak, all at once. Reality is then an eternity of production. This would require that God know the whole process of duration in an eternal supertemporal pulse of thought. Even so this might not pulverize the independence and the initiative of creatures, for God's vision of their actuality would not be foresight. God himself would be unable to *predict* their future in full concretion. Inferential prediction would be limited as in all forms of the philosophy of creation. The insuperable difficulty which such a philosophy presents lies then not in any unreasonable narrowness of application to human interests, but in the intricacies of metaphysical construction. The problem arises how to relate the actual flux of coming to be and passing, of "not yet" and "no longer," which are the actual horizons of creative process to a *totum simul*, the compresence of all time. We shall have occasion later on to examine a philosophy which

attempts such a reconciliation of time and eternity and shall witness its failure. We refer to the philosophy of Josiah Royce.

We are now face to face with the most obstinate problem with which this treatise has to do. We have to examine Bergson's belief (a belief quite essential to the irrational position in which we can form no conception of duration) that to define a situation is to render it subject to the categories of determinism. This will lead us to consider the relation of conception and intuition in Bergson's thought.

*In Time and Free Will* Bergson has openly denied the possibility of defining freedom or creation,<sup>5</sup> although he has written at length to defend its reality. His thesis takes this form: To define is to think in terms of spatial schemata, to appreciate or to experience fully requires recognition in terms of real time or duration. Once we reduce a situation to spatial terms we find that "all is given," because its future and its present differ only through rearrangement of parts, for which order formulae may be deduced.

If to conceive is to reduce to elements which thought treats as spatial and dense, that is, as the opposite of plastic, Bergson is right; to define is to reduce process to successive positions on a checkerboard, in which the jumps occur according to a pattern. But every time we form conceptions of this sort, Bergson asserts, something is ignored. This element overlooked is genuine concrete change, which is not a matter of jumping but of plastic growth. Now, this ignored something cannot be conceived, it can only be perceived directly, or better intuited.

Our objection should by this time be obvious. If Bergson so considers definition and conception, he necessarily commits himself to the irrational interpretation and must derive structure from the simple and structureless as best he can. That this *impasse* is unnecessary, Bergson's own brilliant account of esthetic activity should attest. The problem is to restate the theory of conception and intuition so as to avoid an unnecessary and impossible doctrine.

Bergson's predicament amounts to this: He will not allow conception to deal with anything but material elements. He believes that constitutive elements cannot be defined or conceived, until their growth is complete, whereupon they may be reduced to material elements. Now, if we consider material elements without reference to constitutive, we employ what Bergson calls conception. It is easily shown that on such grounds we cannot conceive of anything but patterns of dense units, in which

<sup>5</sup> *Time and Free Will*, pp. 218 ff.

there is no meaning of any sort save that of position and distance. To this sort of meaning, expressions such as life or purpose are quite inapplicable.

For material elements are stable and inert. Our interest in them lies primarily in their relations rather than in anything that we may call proper to themselves. Constitutive elements require very different treatment if we are even to recognize them. In the *Introduction to Metaphysics* Bergson writes of an intellectual sympathy by which we penetrate beyond externals and intuit objects themselves.<sup>6</sup> This we may call apprehension of constitutive elements. That such is Bergson's meaning may be seen from the fact that he continues by telling us that if we refrain from such sympathy, we shall have no philosophy but only symbolic knowledge. Symbolic knowledge is knowledge through material elements.

But Bergson considers these constitutive elements indefinable because they do not rest at home within the spatial schema. They are without stable properties and definite boundaries, being always in tendency and development. Hence in order to conceive them, intelligence must employ the motion picture device and consider them as made up of a number of positions, which are themselves not plastic or developing.

There is an important truth in all this. But Bergson should substitute the term *calculation* concerning the concrete world for *intelligence* or *conception*. Calculation requires the recognition of material elements, which calculation serves to relate one to another. Thanks to material elements, mathematical ratios appear "anchored" in the concrete world. Without such units calculation would be like an algebra without terms, or a geometry without figures. But shall we say that conception is limited in the same way? I think we shall see that this is not the case.

A moment's reflection will show that the concept deals always with things ultimately indefinable, drawn from experience. These indefinables are purified, to be sure, by an analysis that is loath to admit the presence of the indefinable, although it knows that in the end it must admit some indefinable terms. For the sake of calculation we accept distinctness as a primary character of material units. We need not define this character in terms of something simpler, although we may contrast it with its opposite. On the other hand when apprehending flux and plastic development we must admit another primary character with which our experience supplies us. This character is not the opposite of the distinctness of material elements. Such opposition would yield

<sup>6</sup> *Introduction to Metaphysics*, p. 43.

us chaos or sheer confusion. Conscious flux, or creative flux, has a character of its own which is neither material distinctness nor the opposite. It is, in short, a *tertium quid*. To apprehend this character we must apprehend what we mean by direction or general trend of meaning. Such apprehension is like the notion of unity, something removed from exhaustive definition. It is an immediate form of enjoyment. The conditions of its apprehension may be described but no definition beyond that limit can be achieved.

Bergson has identified intelligence with thought operating under the presuppositions or principles of calculation. Hence he has found constitutive elements unintelligible. He has not described them as unadapted to calculation but as quite irrational, being without essence and yielding to no analysis. But this extreme distinction is unnecessary. If we accept different indefinables in either case, we may conceive of psychic or creative flux quite as clearly as we can conceive of the various operations in calculation. Both may be defined, once the proper presuppositions are made.

Bergson has made a point quite relevant to this. In Bergson's scheme intuition has the task of apprehending the unintelligible. Bergson has said that intuition must initiate and correct conception,<sup>7</sup> supplying it with subject matter and holding it to that subject matter. Such a statement belongs to the esthetic point of view, for which distinction and articulation need not be foreign to intuitive apprehension. From the mystic point of view such a statement is really meaningless. Here intuition and calculation are so divorced that any interaction between the two seems impossible. We might grant that from an intuitive experience a Bergsonian might conclude that intelligence was deceptive. But, if the mystic interpretation of duration be true, he could not correct conception in any way. He would have nothing to add to it save that he had experienced something quite different which he preferred to believe was real. His philosophy would end there.

Once, however, we distinguish conception from calculation we are free to study creative process, to abstract common qualities from examples thereof and to construct a theory of creation, which Bergson has himself in his esthetic position actually accomplished.

If we are to feel any sympathy for the predicament into which Bergson fell when he refused to consider creation as intelligible, we must understand his belief that intelligence always seeks spatial pattern and is really only at ease when its objects may be spatially represented. If this

<sup>7</sup> *Creative Evolution*, pp. 46-7.

were true, definition and conception would be quite inapplicable to the idea of creation. There is, however, a formidable array of criticism drawn up against this interpretation of intelligence, which, I think, justifies dismissal of the doctrine.

We are certainly quite at a loss to sketch a spatial pattern of esthetic generation which will include the novelty of the product and the creative nature of its development. Bergson has spoken of an interpenetration of parts present in duration. This union of elements, once in pre-creational isolation, can be only imperfectly apprehended if we limit ourselves to a spatial scheme. With such a phantasy the logical structure of creation is irreconcilable. Yet Bergson has described intellectual thought as inseparable from spatial pattern.

Intelligence derives its material through a relaxation or breakdown of the tension required to maintain thought on the intuitive level. Through this relaxation, the constitutive organization of an esthetic sequence is relinquished, and even the wealth of secondary qualities may be lost. In the end thought descends to a three-dimensional scheme qualified only by a linear and planar division of spatial elements. Once situations are represented in this fashion, comparison of one to another and reasoning from the structure of one to the structure of another becomes a quasi-geometrical performance. "In fact, when I say that the water on the fire will boil today as it did yesterday, and that this is an absolute necessity, I feel vaguely that my imagination is placing the stove of yesterday on that of today, kettle on kettle, water on water, duration on duration, and it seems then that the rest must coincide also."<sup>8</sup> In this act of thought, there is much abstraction and ignoring of details that seem irrelevant for the reasoning in question.

The abstraction is of course not to be denied, but to interpret such reasoning as a matter of superposition of the situations involved is to challenge serious objection. There are two important grounds for dissent. First, is the superposition actually performed? Second, has such imaginative performance if actual, the philosophical significance that Bergson claims for it?

The first point cannot be satisfactorily determined one way or the other. It resolves itself at once into a psychological problem. But since we cannot be sure that all men imagine the objects of conception after the same fashion, the argument is weakened at the start. Furthermore, we have the statement of at least one mathematician to the effect that we need not always conceive of mathematical subject matter in spatial

<sup>8</sup> *ibid.*, p. 215.

fashion. For Bertrand Russell has denied that conception of pluralities of separate units involves spatial imagination even as an accompaniment.<sup>9</sup>

Besides, to turn to the second objection, even granted that spatial imagery is a necessary accompaniment of conception, can we assert that the proper object of knowledge must necessarily resemble the imaginative form of the idea? If we must assert this then we must admit that conception is limited to spatial subject matter. But such an assertion, while perhaps not unthinkable, is sufficiently radical to require thorough treatment, and this Bergson has not given it. The idea appears as a tacit assumption in his thought.<sup>10</sup>

Discussion of this problem carries us to the classical problem of the abstract idea and to the mode of its residence in the mind. Here we find a discrepancy between imagination and conception. The latter always overflows the limits of the former. The delicate problem of relating the two was faced by David Hume. Mention of his view will afford us an excellent center of discussion. Hume describes the abstract idea as a habit of thought. This is in some respects fortunate as it emphasizes the active nature of the idea. Professor Hendel summarizes Hume's view as follows:

"There is in the mind a certain number of habits of thought, each of them representing whole sets of particular ideas that have unity with each other despite their obvious differences. These habits are 'acquired' in the course of experience. They depend upon the original impetus of the mind itself to assimilate everything to everything else and they depend, also, upon the actual repetition of the events in nature. The *usual* relations are those that really *determine* our thinking. They are the ones we denote in language. When such customs of the mind exist we need only hear a general term to think of some particular idea suited to the context of our thought or conversation. The term touches off a very active disposition of the mind itself and this disposition then exhibits a remarkable power of discrimination, calling up to definite representation whatever is most relevant to the occasion. The custom is

<sup>9</sup> *The Philosophy of Bergson*, Cambridge, 1914, p. 15.

<sup>10</sup> G. W. Peckham, *The Logic of Bergson's Philosophy*, New York, 1917, throughout (this point is a central thesis of the dissertation). Also A. Mitchell, *Studies in Bergson's Philosophy*, Lawrence, 1914 (*University of Kansas Bulletin*, Vol. 15, no. 4), p. 45 *circa*. Also A. O. Lovejoy, "The Problem of Time in Recent French Philosophy," *Philosophical Review*, Vol. 21, p. 331.

then something potential, fraught with activity, prompt to suggest ideas."<sup>11</sup>

Thus the abstract idea is not bound to any particular set of images. It is not a picture. It is rather an active disposition that reaches into the past and selects and refashions itself to suit the direction of our thought. To be sure, it does not follow from this that human conception is bound to no *form* of imagery such as the spatial. But it does show that thought surpasses any given imagery that accompanies it. Conception is not to be described in terms of the imagination that may assist its activity. Thought employs imagery, it is not the slave thereof. Our image of what we conceive is only a makeshift. Accuracy is attained only through discounting the inaccuracies of the image.

This account of the abstract idea is essentially that given by Bergson in his discussion of interpretation outlined above. (p. 78.) This differs from the whole irrational strain in Bergson's thought. Here Bergson does not recognize a sharp distinction in thought between concept and intuition. All thought becomes on this view more homogeneous. Even the concept is founded upon interpretation and selection of material. It is originaive and free because it endeavors to overcome the limitations to which its life in the mind has been subjected. To deny this is to reduce conception to a moment of sheer imagination or "picturing" and to deny it any cognitive value. Thus we may conclude that even though all conception *may* be subject to a more or less spatialized accompaniment in imagination, we have the right to maintain that in conceiving we transcend this imaginative medium.

In order to discard Bergson's distinction between intuition and intellect we are bound, if we wish to retain the valuable portions of his work, to suggest a more successful distinction that will preserve the vital features of Bergson's thought. For our purposes in this matter, the classical terminology is perhaps the most illuminating. Let thought be described as discursive and intuitive. According to this scheme, mind either plays over a wide range of material, discovering similarities and distinctions, or it gathers the whole of the material with which it is at the time concerned into one relation or organization and for a moment rests in the enjoyment of its achievement. Discursive thought brings to light the recurrent types of relations present throughout all reality that is open to mind. It is analytic and comparison is its very life. Intuition, or esthetic thought, is less comparative, it moves toward the individual

<sup>11</sup> *Studies in the Philosophy of David Hume*, Princeton, 1925, p. 128.



and the unique. The difference between discursive and intuitive thought is one of degree, all thought being intuitive insofar as it approaches any situation and grasps its particular organization.

To be sure, intuitive thought may function in realms the most abstract from the concrete world with which our activity seems to be involved. Intuition's distinctive character lies in that it possesses a direction, viz. from the more general to the more individual. This "individual" does not here imply necessarily the actual world of the *Élan Vital's* creation. Intuitive thought may actually lead us away from the world which we call the concrete. The use of the word *individual* refers to the fact that in intuitive thought we organize our material into an interrelated structure which reveals itself to intuition in a single unified pattern. In the *Introduction to Metaphysics*, Bergson describes intuition as the apprehension of the unique, while analysis he describes as reducing its objects to elements common to other objects.

Intuition profits by the wealth of distinctions supplied by analysis and seeks to produce a union of abstract elements that will embody something beyond the meaning of the material already apprehended. It is true that the new psychic achievement may refer to many objects. Its objective correlate may be characteristic of many situations. Yet it will possess a structure of its own, whose texture requires that insight be especially devoted to its apprehension.

Concentration of meaning in medium of apprehension or production is the criterion of intuitive thought. Thought is completely concentrated in this fashion when every aspect of its material is indispensable to the meaning embodied in that material. Works of art approach such complete concentration when any alteration, however slight, tends to dispel the meaning or "point" present therein, to destroy the esthetic value of the object. A completely intuitive discovery would be one in which all the facts involved were in their complete detail necessary to the assertion of the truth in question.

Esthetic standards in inquiry extend beyond logical demonstration. Thus concentration of material may apply in mathematical demonstration to the degree of economy and elegance with which unnecessary material is avoided and the proof rendered as simple and direct as possible.

The esthetic excellence of a moment of expression depends upon this concentration. Recognition of an extraordinary degree of such concentration is esthetic approval. That such concentration is present in degrees is obvious when we consider the frequent criticism: "I can see

what the artist was driving at, but he hasn't altogether succeeded." The work is in such cases not sufficiently dominated by the expression which it embodies.

We do not say that creative or intuitive thought may not be presented in commonplace, discursive language. This, of course, frequently happens. But if this is the case the language employed is not the medium employed when the discovery was made. This is, I suspect, very true of much philosophical literature, even of the greatest. The medium employed in meditation is often only partially verbal, much depending upon the schematic visual imagery with which the philosopher encircles his thinking. If this could be successfully published, we should perhaps not find so many esthetic monstrosities among philosophical writings of reflective merit. But even these, after long acquaintance and pondering, the mind comes to love and rejoices in the subtle symmetries which lie beneath verbal expression.

Intuitive thought moves toward richer concentration. Discursive thought ignores this. A writer's thought takes an intuitive direction when he grasps a plan of composition and sees the relative positions therein of the various sub-topics which he desires to include in his essay. Now, suppose that after this plan has been apprehended, he comes upon an instance or a fact which he suspects is pertinent to his work. In what section shall he include it? To decide this does not require intuitive apprehension of the plan. Discursive thought is here sufficient. The author reasons, "This fact may be classified as an example of such and such. Section X is to deal with this topic." Therefore he enters the fact in his notes under section X. Such reasoning recedes from the intuitive level attained in formulation of the plan.

There is, of course, a sense in which discursive thought is often termed intuitive. This is the fourth type of intuition which we mentioned on page 57. It is the apprehension of relations without which discursive thought cannot distinguish differences or compare similarities. It is best to be observed in the chain of mathematical reasoning, grasp of each "link" in the reasoning requiring such intuition. We do not, however, employ the term *intuition* in this sense. Rather we should suggest for this the term *intellectual perception*.

Intuitive or discursive expression may attack any subject matter. The difference between the two lies in the form of expression not in the subject matter expressed. This alters Bergson's dictum concerning mathematics, which embodies for him the pattern of intellectual thinking. Now, it is true that in all mathematical thought we encounter

something apparently similar to the relation of significance and medium of expression, to be encountered in discursive thinking. In mathematics we find that meaning is in a sense everything. The manner of its attainment seems indifferent to the result. In geometry there are usually many ways of establishing a proof. Also in art there may be said to be many possibilities of procedure, but no two of them may lead to the same result. This leads Bergson to deny that mathematical objects endure. They are, he asserts, unaffected by their histories. It is as if the world in which they exist were always beginning again. This is true but it does not follow that mathematics is no field for intuition.

Scientists and mathematicians are by no means excluded from creative activity. Their work, on the contrary requires it. The development of their sciences depends in large measure upon the insight and ingenuity which they bring to their problems. It is in fact quite possible to perceive even mathematical relations drawn into esthetic union. This is the type of experience so celebrated by Spinoza in his doctrine of *scientia intuitiva*.

After this discussion it should be clear since reason and intuition are not equipped to handle different material, but differ rather in the way they handle it, that reason is quite capable of comprehending creative process. Creative process is intuitive activity. But to maintain that therefore reason cannot understand it, would require the utmost metaphysical sleight of hand. My idea of blue is not itself colored nor need my apprehension of creation be always a creative or intuitive act of thought.

As a matter of fact it is only through discursive thought that we may realize the wealth of contingency and production that creative process implies. Intuitive creation does not compare its own acts with other things when it creates them, nor does it assert the novelty of its product. It is only when we reflect and compare constitutive with material elements that we realize the plasticity proper to esthetic thought. For this reflection, analytic distinctions are essential, as in all inquiry, in order that a beginning may be made.

The reader will recall that Bergson has said, probably when not in his irrational mood, that intellect always lights the way for intuition, which although it possesses a wealth of achievement is itself without a sense of direction. This is true since provisional foresight requires a grasp of abstract possibilities which can be seen as possibly applicable to the concrete only after preliminary analysis of both the abstraction and the future scene to which it is to be applied.

This discussion has made possible a definition of creative process, considered from the esthetic, rather than from the mystical point of view.

Creative process is a movement toward coherent realization of an ideal. This movement consists in a drawing together of the patterns of procedure supplied by memory, and subjecting them to the dominant purpose of the act, the realization of the ideal. In so far as the fusion of the patterns embodies the ideal, creation is successful. The more successful the creation, the more concentrated the product, i.e. the more thoroughly the ideal is realized in the medium, and the more essential to the realization is every phase of the medium.

Intuition is thought increasing the concentration of its product. Reason is thought ignoring the full concentration of its subject matter in order to indicate certain similarities and relations between the subject matter and other objects.<sup>12</sup>

The philosophy of creation, as it has here been presented, commits us to a definite point of view in epistemology. We cannot identify object known with the psychic content of the knowing act, be it human or divine. For there must exist at least one type of object which is not identical with psychic content of the knower, namely the past which cannot be identical with the concrete present. There is, of course, a sense in which the past is in the present for the present would not be what it is if the past had been otherwise. But there is also a sense in which the past does not and cannot exist if the present is to be what it is, namely the successor of the past. Hence past event cannot be wholly identical with present idea. Further, the past is quite independent of present idea in the sense that nothing that the idea can do will alter what the past has been. The past is remote from present action. It seems necessary, then, to admit that known objects are or may be independent of the knowing mind.

Now, certainly a present object is, for all we can say, no more "in the mind" than a past one. Such being the case, we have no reason to maintain a subjectivist theory of the status of present objects. For the philosophy of creation there are no future concrete objects. Hence all concrete objects would seem to be independent of the mind which knows

<sup>12</sup> Compare LeRoy's *Pensée Intuitive*, p. 57: "Le progrès de la connaissance comporte un rythme oscillatoire, un double effort de propulsion réciproque, une alternance de concentration intuitive et de détente conceptuelle." And again: "l'intuition reste constamment mêlée au discours le plus analytique." LeRoy also introduces the *dominant idea* of Ravaisson, Boutroux and Séailles, which he happily calls *schéma dynamique*. The schema chooses, orders and in general directs the creative growth.

them. But knowing must be distinguished from creating, the final act of creating an object being identical with the object itself. Knowing is then not the most intimate relation that can pertain between mind and object.

Knowing may be said, in scholastic fashion, to embody some form of the object known—some universal present in the object. Universals may be realized in "ideal" medium, namely in the thinking of a student or of an observer. The form embodied in knowing mind may be identical with the form embodied in nature. Thus mind and nature may "correspond." Mental media of embodiment comprise language, the actual technique of the arts, and the several forms of non-linguistic media of discourse used, for example, in mathematics.

In much sensuous perception the form of the object is rather represented than directly embodied. This will be challenged only by those who like Alexander try to read colors, etc., into physical objects rather than into awareness of objects through a natural physical medium, i.e. one not produced by the knowing organism itself. In sensuous perception the link between mind and object is not present in the act of knowing as it must be in fully developed intellectual understanding. In a real sense, perception offers conclusions without premises.

Thus the philosophy of creation is definitely opposed to subjectivism. It accepts a realism of concrete objects, and a "participatory realism" of Platonic forms which enter both these objects and the mental activity of organisms capable of discourse.

#### CHAPTER IV

### COSMOLOGY OF THE "ESTHETIC" THEORY

THE irrational strain in Bergsonian thought predominates sufficiently throughout *Creative Evolution* to prevent the philosopher from including in his doctrine anything very similar to fully conscious choice of possibilities made by the cosmic force impelling evolution. Order lies in the past and the future is not yet. To be sure, the past or memory propels itself into the future. But we have seen that the use of the word "purpose" is impossible in describing the mystical creation.

However, if the esthetic side of Bergson's thought be allowed to dominate his cosmology, a much more intelligible account of cosmic creation may be elaborated. This would be in essential accord with Professor Cunningham's criticism of Bergson's theory which we have already quoted. This critic denies that Bergson has made provision for any foresight or providence in his system. Hence, according to Cunningham, Bergson has in effect renounced teleology. Professor Cunningham has, however, seen only the mystical side of Bergson. Bergson, when he thinks of process from the esthetic point of view, would have no difficulty in explaining how provision for an unfinished, plastic future may be secured, since on his view contingency of creation is tempered by the ideal forms which hover over and enter creative process. Such a doctrine, although not obviously explicit in Bergson's writings may easily be deduced from an application of the doctrine of memory and the theory of intellectual effort to the theory of creative world-soul or *Elan Vital*. It is the logical conclusion of the esthetic theory, once we grant that the idea of creation may be applied to world-process and to evolution.

So conceived, God is not an impulse or force but a creative spirit, seeking to enrich his creation with as much perfection as possible. Like an artist, he outgrows his creations and with the very act of production beholds elements of imperfection, that the creative mind will seek to avoid in future creation. The contrast between the ideal of perfection and the actual achievement breeds unrest that inspires continual effort and further creation. This activity will become clear to us as we proceed.

Constitutive elements derive from the memory patterns of the creative world-soul. These elements or universals are of two types; or, perhaps better, they may be considered in two ways, for at least some of them may be studied from both points of view. We may consider them as structural and value universals. The first are those which are employed as means to an end, the embodiment of value which is itself expressed in hierarchy of value forms. Physical patterns, the great typical forms of nature's more pervasive articulations are to be considered as structural. So also many of the patterns of vital structure, provided that these are not in themselves valuable. These universals are not symbolic reflections or distortions of a world process to which our thought cannot penetrate. Structural universals are not even material elements, although in their embodiment they do supply the ground for calculation.

The study of living forms when carried on with teleological reference, i.e. with interest in the adaptation of organ and function to organic needs, may be said to reveal something of these structural universals in their formation. In physical science we have at present no such insight into the growth of structure. Physical science reveals the rhythms of nature but not the meaning embodied in them. Thus the physical sciences penetrate the real world but do not ask, even so, all the questions which may legitimately be put to nature.

The scheme of embodied cause and effect, the skeleton of conformation which holds the concrete world together, may be called matter. To do this, is to use the term not in its ancient sense of *hyle* but in its more recent meaning, as the underlying substance of concretion. We may now read a rich meaning into Bergson's saying that life (creative process) and matter are tangent to one another, rather than coincident.<sup>1</sup> The moment of concrete embodiment is the togetherness of mind and matter, of conformation and of realization of value. But, if left to itself, if that is conceivable, matter lies indifferent to value, the principles of its structure seeming to generate nothing but marvellous complexity. Thus life and mind touch upon matter, but do not accept its direction.

Bodies, atoms, electrons, etc., are material—at least material insofar as they lend themselves to physical science. Thus as objects of science they are not moments of creative process but patterns in the concrete interconnection of things. Process embodies its ends in such matter, but even at the moment of embodiment is only tangent to matter because it does not relinquish its immaterial principle of creation.

<sup>1</sup> *Creative Evolution*, p. 31.

Biological species, general types of human personality, etc., are probably value universals. These are very complex in structure. Their production is the work of creative intuition which builds them slowly by embodying the form of value—deiformity, or autonomous will—more and more thoroughly in the form already achieved.

Science is, in general, the creaturely mind's systematic effort to grasp universals, structural or value universals. Mind, then, attempts to reverse the process of natural creation, to move from the tissue of the concrete to the forms that have entered into its making, thus rendering the concrete itself really articulate. The physical sciences do this by discovering permanent relations pertaining between general types of material elements; thus mind captures the rhythm of nature, refinement toward greater precision remaining apparently always possible. Thus are *universalia post rem* embodied in mind. The term *post rem* is not really a very happy one, for it at least *suggests* that the universal in mind is not the real universal which went into the making of the concrete. This is not true, for insofar as science is successful the forms which it presents as the result of investigation are identical with those that go into the making of things. When the results of science are not so identical, they are literally *post rem*. But the contributions of science need not, for all we can say, be necessarily of such a nature.

Thus the student of living things may well urge that life is conditioned by a vast array of material and efficient causes. This the creative philosophy has no desire to deny. In fact, the creative philosophy realizes that according to its prime hypothesis this situation is to be expected, for creation does not proceed without a medium, nor does it violate the principle of sufficient reason. There is, in other words, no supernatural intervention which violates the historical continuity of nature. No "principle of life" intervenes and mysteriously alters the structure of living beings. Every event, vital or otherwise, must be in coherent conformation with the past. Thus the empirical investigator will face no impossibility in searching for the inanimate conditions and even the inanimate elements of life. But this does not preclude the truth that condition and element are the occasion and the medium through which creative mind has embodied an image of itself in the form of living beings. The best way to hamstring a materialist opponent is to accept his doctrine.

The interplay between the forms of value and of structure comprises the process of creation. We find therein two complementary functions, first the creation of value universals or the embodiment of value



in the abstract patterns of production, and, second, coupled to this, is the later embodiment of the many value structures as coexistent in the concrete world, which is the outcome of creative process. Thus there is in all creation a movement toward an ideal but this motion must be reconciled with the concrete texture of things in which the ideal must be embodied. Otherwise production would be no more than the incomplete creation of the daydream. The requirements made by concretion give rise to the counter-motion in which the ideals envisaged are embodied as well as may be in the closely interwoven texture of final achievement. This reverse motion is, of course, creative and contingent as is the forward drive toward ideals.

The difference between theory and practice may be described as the difference between the two movements of creation. Theory is the first motion which points a new direction, springing away from the concrete. Practice turns backward and actualizes as well as may be the advance made in theoretical insight. The necessary coherence of actualization may pulverize the most ingenious plans. A moment comes when action is imperative if the creator is to save what he has achieved. Thus at times the necessity encountered in concretion destroys embodied value for whose preservation no plan of procedure has been developed. This is the true *ananke* which Plato attributed to space.

In fact, if we accept a suggestion of Whitehead's, we may interpret the *receptacle* of Plato's *Timaeus* as the first principle of concrete embodiment, what we might call the plan of togetherness according to which created entities must conform with their contemporaries. Space is the prime mode of such contemporaneous conformation as causality is of conformation in succession.

We have seen that production is contingent and that unified structure and order exist as the result of creation. Every pulse of creation expands into novelty. This novel contribution to reality must be judged as it is received and the success of value's embodiment therein must be appraised. Apparent imperfection or root of imperfection discovered in the production of new patterns or of abstract fusions of patterns may be withheld and new structures substituted for the failures. But this is not true of the final plunge with which creation enters the concrete. This last unification of elements once made cannot be withdrawn from realization. It exists. Recognition of an embodied imperfection is recognition of evil. Evil is not willed in creation. It is best described as the continual failure, which the fact that no object of creation can be absolutely foreseen necessitates. The final creation of the concrete, like

all creation, cannot be foreseen in detail, and furthermore it cannot be discarded. The obvious result is the influx of imperfection, which is an unavoidable loss of value.

Bergson has in his latest work *Les deux Sources de la Morale et de la Religion* dealt briefly with the problem of evil and offered an explanation essentially in harmony with the one that we have suggested. Bergson speaks of an interrelation of things such that to eliminate a part we must eliminate all.<sup>2</sup> Thus we admit that good springs up with evil and that *in the concrete* we cannot at the moment of creation separate them.

That the influx of imperfection may ever be overcome seems doubtful. Perfection of embodied deformity is apparently impossible. Every moment of creation sets its own problems and every value achievement requires elaborate creative activity to preserve its presence in the concrete. Such activity is subject to all the limitations of creation and hence subject to unforeseen loss of value. Complete or absolute achievement seems out of the question. The City of God is a genuine utopia in that it can never be realized.

But let no one say that in this case all realization of value is futile. Realization of value it remains, although absolute perfection is unattainable. Indeed, it is not in progress for its own sake that value lies embodied. It is in the actual perfection attained by creatures. God must create more perfect forms of life. It is of his eternal nature so to do. But this is no reason why man must look for human worth and happiness only in progress. To do so amounts to the admission that man can attain no important worth in the present. Indeed, the joys of unimpeded activity, mental or physical, of the discovery of beauty and of personal worth are better guides to the achievement of value than is any formula that requires continual dissatisfaction as the genuinely moral attitude.

Progress is the most questionable of gods. The human race may not be for too long a time favored in creation. The enthusiasm of the evolutionary perfectionist may well be dampened by the reflection that higher forms of life when they appear may very well bear the same relation to man as man bears to the lower animals. More than one thinker has realized this and tempered his enthusiasm for "ever higher life." Santayana rebukes Bergson for such an attitude, inquiring whether the *Elan Vital* may not in time manifest "digestive intention"

<sup>2</sup> *Les Deux Sources*, etc., p. 280.

toward the human race.<sup>3</sup> And C. D. Broad, reviewing Alexander's doctrine of emergent deity, or next higher level of creature, has suggested on the same grounds a sort of inverted communion and transubstantiation which may relate man to the deity to come."<sup>4</sup>

The esthetic theory of creation makes possible a spiritual pluralism. In this section we must outline the form which such pluralism may take. It is in this respect vastly preferable to the irrational view according to which personal identity if existant must remain unexplained or be attributed to the contaminating influence of matter.

Wealth of personality, which is autonomous apprehension and pursuit of value, is the arch-goal of creation. The possibility of the achievement of this end, even in the slightest degree, is made obscure by the difficulty of conceiving a creature in any sense as a creator. To do this we must undertake a further discussion of the relation of abstract pattern to the world of concrete achievement. This may clarify the status of the individual agent and reveal in what measure he is dominated by creative process not his own. More is required of a philosophy of human freedom than an esthetic or creative interpretation of becoming. Man is not man if he is *only* a creature. He must appear not as a character in a drama, but as a person: the product of his own history, which he has had some hand in fashioning.

If this is indeed the state of affairs, the creative contingency of the world-process will be multiplied by every conscious agent within it. How then can there be a general direction and unified order throughout the whole? The question is central, for without a great measure of such unity, all discussion of a creative world-soul and of esthetic purpose is futile. The solution is vital to an ethically reasonable interpretation of life. It is fortunately not impossible. With an outline of this solution we shall close our brief account of the esthetic cosmology.

"So careful of the type she seems,  
So careless of the single life."

The lines were written of nature. For many readers there arises an implied *caveat* that here is an insufficient account of the situation, and that we must search further for a source of power that is careless of nothing, and for which not even the fall of a sparrow is negligible.

<sup>3</sup> *Winds of Doctrine*, pp. 103-4.

<sup>4</sup> *Mind*, N.S., Vol. XXX, pp. 148-9.

And this *caveat* we must make, would we dignify creaturely existence. And yet to do this, we must show that primal creation stands, so to speak, aloof from its creatures, although cherishing the worth embodied in them, in order to allow that worth to develop. Religion has been always without the metaphysical concepts to explain such a situation, although the ethical attitude common to the higher religions always presupposed some such order of things.

We have already asserted that the act of creation is identical with the object created. Hence it might seem that God cannot create a man, unless God's act is that man. If, in turn, the man create, then God creates again by a sort of secondary creation. Such a denial of man's ability to create and contribute is unreasonable and, furthermore, surpasses the scope of our present concepts. Such a view follows upon a misconception of the nature of the creature. The final act of creation, what we have called the plunge into the concrete, is the creature. This may be interpreted to mean that the creature creates itself. This is pretty much a matter of terminology. For we have long ago admitted that the creature cannot be foreseen in concrete individuality and we have admitted that its emergence is contingent. The final act of creation, the creature, *asserts itself* under the conditions set upon it by concrete environment and the direction which creative process is pursuing. We shall see later that Professor Whitehead has made this a cardinal doctrine of his philosophy of organism.

Man is an unusual creature. He is more than a final act of creation, flowering in the concrete. Man unlike lower creatures includes much theoretical activity prior to concrete embodiment, for man deliberates. His deliberation is actual, having a concrete foundation, but it penetrates possibility. (See below, pp. 140 ff.)

Man's deliberation is sustained largely by creation not his own. The opportunity for deliberation is given to man, being based upon his complex body, its functions and its education or its early moulding into habit. Such opportunity is the grace of God. Actual deliberation and decision constitute a man's self. Man is active thinking.

God's control and domination of man lies, insofar as it exists at all, in what is given to man. God presents man with problems.

This situation may be described by means of a concept that we shall call the "social" universal. This is a type of structural universal which has application to the behavior of conscious beings. The process of its concretion does not overwhelm the spontaneity of the conscious agent in whose activity it is embodied. Let us describe this universal as fol-

lows: In the process of cosmic creation there exists the knowledge that given certain concrete conditions, indefinite groups of agents, whose numbers can only be approximated, will meet these conditions in a certain fashion which will be in general similar for all members of the group. These universals are the results of insight into the deliberative situations into which conscious beings may be plunged. They are similar as regards object matter to the statistician's knowledge of certain regularities in group behavior. They are Bergsonian memory patterns applying not to the individual's choice directly but to group choice, groups being recognized as precreational entities. By the recall and creative fusion of these patterns, the histories of societies or of aggregates of fairly similar conscious agents may be planned in advance by the creator in the same tentative fashion as the history of any entity may be planned. But within this general plan no special plan is elaborated for any individual conscious agent. The agent may in fact quite surpass the possibilities considered in creation and invent a novel attitude, thus actually contributing to the patterns of action pertaining to the situation in general.

But this is creaturely creation of an unusual order. Most frequently the creature is limited to choice of several modes of procedure which are fairly well outlined by habit, custom and precedent. Here often the power of the spirit is thwarted by lack of its own activity, the mind having failed to play suggestively about the situation and to take advantage of its ramifications. So in general there will be a certain pattern of repetition of response, enduring from one social situation to another. And this will make possible a creative providence initiating the conditions. As more and more autonomy is embodied, this providence will grow less and less accurate. Creative providence thus tends to lessen its own sphere as it succeeds in its undertakings. God strives to set man free.

This Bergson has realized and celebrated in a famous passage.<sup>5</sup> But not only are insight and creative development of future activity aspects of autonomous life. Stability of character and the Stoical ability to postpone decision when some immediate action seems perhaps speciously agreeable are undeniably important. These may also develop in a world of creative process. Physical disposition, habit, wit, learning and ideals of conduct, whether consciously developed by the individual or borne upon him by a happy tradition and environment, strengthen him to hold a considered course through the flux of concrete becoming. Thus certain

<sup>5</sup> *Creative Evolution*, p. 264.

types of individuals, those possessing such dispositions, will on the whole endure the union of their lives with the actual flux of things more successfully than others and realize in themselves greater perfection and greater happiness. This fact is the foundation of ethical speculation, and its justification.

With this reservation we close our present sketch of the esthetic account of human freedom, i.e. of a reasonable interpretation of becoming in terms of which man may find an assertion of his own reality as an agent, intelligent and purposeful. Let us briefly summarize the tenets of the position we have taken. Through development of Bergson's esthetic interpretation of creative process we have found a certain creative cosmology not inconceivable. In this cosmology becoming is interpreted as creative invention. It is the explanation of history, the history of animate and inanimate. This production proceeds after the fashion of esthetic creation. It works with a vast and complex material, composed of abstract or unembodied patterns. These patterns are brought together in creation to form the texture of concrete productions. New patterns may also be originated in planning activity. This activity, both in the planning and the execution, has a contingent aspect, in terms of which the presence of evil may be interpreted as unforeseen or unforeseeable failure. Many creatures are creative agents. Their activity is not wholly dominated by cosmic creation. This is because cosmic creation of animal history proceeds through the employment of social universals by which no individual's activity is absolutely dominated, although the general social situation in which the agent finds himself may be the embodiment of a pattern deliberately employed in cosmic creation.

This sketch, we believe, satisfies at least *de jure* the requirements of a "reasonable" interpretation of life. The moral as well as the cognitive aspects of man's experience are preserved intact. Man's conscious life of practical desires and decisions and his theoretic life of understanding are interpreted as equally significant in revealing the nature of the real. They are both supported by the system outlined. The contingent element in creation supports as we have seen the reality of the moral life and of moral decision. The employment of patterns of elaborate structure in the creative process supplies the object of scientific investigation and thus establishes the significance of man's theoretic activities.



**PART THREE**  
**AFTER BERGSON**





## CHAPTER I

### ALEXANDER, CROCE, GENTILE

#### I

WE HAVE seen that Bergson's irrational theory fails because it would derive the articulate complexity of the world from a pseudo-simplicity of doubtful pedigree. There is an analogous situation to be found in the philosophy of emergence which may be best studied through the writings of S. Alexander. Alexander would derive the worlds of matter, life, and mind from a primordial flux of sheer motion, which "creates" its complex products somewhat as the irrationalist Bergson would describe. Both Alexander and the latter compare cosmic creation to the unreflective and impulsive phase of artistic creation.

For Alexander the universe is composed of events. Events happen or occur. The togetherness of events is space-time. Neither space nor time exists without the other, nor is either conceivable apart from the other. The two are united as motion. Without space, time would have to be, as in Descartes's universe, constantly and completely recreated, for the past would perish completely. The past is with the present, owing to the fact that its pattern endures from one time to another; and Alexander sees such pattern as fundamentally spatial. Without time, nothing would happen in space; and for Alexander this means that there would be in space no principle of differentiation, no structure. Together space and time appear as motion which is the stuff of all things. Separated, space and time are lifeless abstractions of no significance. If we care to employ the "human metaphor," Alexander thinks that we may call time the mind of space and space the body of time. Time is the active and productive, space the passive and conservative element. Remove space, and the moments of time, disembodied, are without orientation and background. Remove time, and space, unnerved, is without initiative, change or structure.

Space-time is "historied." We miss the dynamic nature of things if we insist upon considering space-time as essentially made up of cross-sections of simultaneous structure. Such sections would be inert and isolated from their past. Space-time as a whole is a totality of perspectives or histories. Every event has a perspective of space-time which

constitutes its historical background. Space-time is the sheaf of these intertwined perspectives. The fact that one event may occur in many perspectives does not require us to admit that it appears many times in space-time. The event has its own appropriate (proper) relations of chronological and topographical significance. Hence sections of space-time are well founded and actual entities, although they are by-products of history. (Here is Whitehead's distinction between the genetic and the morphological, a distinction so essential to the philosophy of creation.)<sup>1</sup>

Any portion of space-time "possesses certain fundamental characters which belong to every existent generated within the universe of space-time. These fundamental pervasive characters are the categories."

Alexander describes these characters in such terms as Identity, Diversity, Difference, Universality, Particularity, etc., etc.

For the purposes of this brief exposition the most important of the categorical features of space-time are the substantial and the universal. Any existence is a substance in the sense that it is a piece of space which is the scene of succession. Thus "a straight line is an extreme instance of the life of a substance." But generally speaking, substances have more body to them than straight lines can boast of. Such complex substances are things or contours of space within which take place the motions correlated to the qualities of the things.

A substance, then, is an enduring contour of space-time. Alexander at times calls them singular universals, for their continuity in space-time bears witness to the fact that they bear a plan or pattern within them. Now, throughout space-time we find that substances bear distinct resemblances to one another; this fact drives us to the contemplation of the generic universals. The nature of these may be also expressed in terms of space-time. Hence a generic universal is a constitutive plan of motion or action, as Alexander phrases it, a "habit of space-time." Thus they are spatio-temporal in character although not limited to any given portion of space-time.

Alexander is puzzled by the fact of repetition of universals among particulars. He cannot see the need for it, nor the means by which the repetition is accomplished. He is inclined to believe that we must regard the presence of multiplicity as purely empirical, or as a brute datum. With admirable honesty, worthy of a true philosopher, he presents to us his difficulty. "Why there should be finites within the general matrix

<sup>1</sup> *Space, Time and Deity*, Book I, Chaps. I and II. The following passages are also from Alexander's *Space, Time and Deity*. By permission of The Macmillan Company, publishers.

[of space-time] we can understand; for time and space, being indissolubly interwoven, do not remain extended blanks, but break each other up into differences. We cannot, however, see, at least I cannot, why these finites should exhibit actual repetition in their kinds. Perhaps we know too little at present about the repetition of individuals among organic forms to be able to face the more general and simpler problem. . . ." Alexander offers no answer and concludes, "I can give no answer, and until the answer can be given I must admit that the scheme of things which has been suggested as an hypothesis, and has so far been verified, presents a grave defect; equally so whether the actual multiplicity of individuals in their kinds is accepted as a purely empirical feature not admitting of explanation, or as an unsolved empirical problem."<sup>2</sup>

But to return to the development of the system: a substance is a theater of motion which develops within itself empirical qualities such as color, sound, life. Each quality is in correlation with certain motions. (Alexander consciously speaks in Spinozistic terms.) As the path of evolution is traversed, configurations of motion attain such a complexity that new qualities arise. Thus life emerges from the inorganic and thought from living things. These qualities we must accept as purely empirical, unpredictable features, accept with "natural piety" as Alexander puts it.

"The higher emergent has been described as based on a complexity of the lower existents; thus life is a complex of material bodies and mind of living ones. Ascent takes place, it would seem, through complexity. But at each change of quality the complexity as it were gathers itself together and is expressed in a new simplicity. The emergent quality is the summing together into a new totality of the component materials. Just in this way, as our thoughts become more and more complex, some new conception arises in the mind of a discoverer which brings order into the immense tangle of facts and simplifies them and becomes the starting-point for fresh advances in knowledge; or in social affairs some vivifying idea like democracy arises to create as it were a new moral order, in which distinctions and divergences arise which demand in their turn a new practical key. Somewhat in this fashion complexes of one stage of existence gather themselves for a new creation, and additional complexities mean new simplifications.

"It follows as part of this relation of the higher level to the lower, as an empirical emergent from 'material' already endowed with its own quality, that the empirical qualities of the 'material' are carried

<sup>2</sup> *Space, Time and Deity*, Vol. II, pp. 312-13; see also Vol. I, p. 229.

up into the body of the higher level but not into its new quality. Life is based on material existents which have color or smell or weight. But life is not itself colored, nor, except in a metaphor, sweet. . . ."<sup>3</sup>

Thus Alexander tries to undermine the materialist reduction of life and mind to inorganic matter while avoiding the necessity of postulating a vital or mental energy. "The thing called mind has not in respect of its mentality the lower empirical qualities. Energy is an empirical quality of matter and does not belong to mind or life. Yet it is easy to interpret the phrases 'vital' or 'mental energy' as the energy of the material equivalents; and in this way, be it observed, the difficulties of the application of the principle of conservation of energy to life and mind disappear."<sup>4</sup>

The novel nature of each emergent cannot be predicted. In this matter Alexander holds true to his analogy of the growth of knowledge and psychic creation. However the spatio-temporal configuration of the world he considers predetermined and, granted a calculator with sufficient breadth of insight, predictable. But this calculator could not predict what qualities would be evoked by the complexes he predicts in space-time, unless he lived to observe them. Space-time is, to be sure, a very abstract and fundamental conception. Even the world of matter is an emergent arising from its matrix. But even so I think this basic element of determinism is out of place in Alexander's system. We shall discuss the problem later.

Mind plays a comparatively limited rôle in Alexander's universe. He maintains that even the secondary qualities are not dependent upon mind but actually resident in their objects. Thus although the objects are presented to the mind, they are not subject to it. To say that they are, he thinks, involves a failure to recognize the distinction between the act of mind, which is provoked by a medium, and the non-mental external object.

Although denying that mind is more than an empirical quality of space-time, Alexander finds in reality as a whole a *nisus* toward better things. The world, he thinks, is always working to give birth to new qualities better than those it has already produced. He finds in the qualities a rising scale of perfection. This perfection he describes in orthodox fashion, acknowledging a debt to Bradley. It is a matter of wealth of organization and close interrelation of parts. In the life of man, perfection is most manifest in moral autonomy or self-legislation.

<sup>3</sup> *Space, Time and Deity*, Vol. II, pp. 70-1.

<sup>4</sup> *ibid.*, Vol. II, p. 71.

Toward a fuller perfection, which is to be expressed in new qualities, the world is being drawn in the *nisus*. The new quality with which the universe is big Alexander calls Deity. God is the universe possessing deity and religion is based upon "a brute sentiment for deity" by which we feel that we are being drawn toward the next emergent and that we contribute toward it. In the religious sentiment we realize through our whole constitution of body and mind rather than through any specific faculty that in the forward movement "due to the onward sweep of time our minds with their substructure of body are caught and our religious response is at once the mark that we are involved in that *nisus*, and that our minds contribute in their part towards it. . . . The whole world with its real tendency to deity stirs in us from the depths of our nature a vague endeavor or desire which shadows forth its object. Then intellect comes into play, and discovers in detail the characters of this object, and finds at last what it truly is, the tendency of the world toward a new quality."

Each quality is related to one below it as mind to body, the lower quality having been drawn to an intricate spatio-temporal complexity out of which sprang the new emergent. Mind, thinks Alexander, will be related to the next emergent as body is in its turn related to mind. Religion is then an elemental feeling that the world is making something out of us, which will surpass us in perfection. It is, of course, impossible to predict the new emergent.

There is, as we have noticed, in Alexander's universe an element of the unpredictable, but this is confined to the form of the empirical qualities. Within the limits of emergence, even the qualities behave with an orderly necessity. Unlike Bergson, Alexander does not shoot his universe full of the unpredictable. His treatment of human freedom shows this clearly. Freedom is not the unpredictable or the undetermined in human actions. As a moralist, Alexander is suspicious of such freedom. Rather, free action is that of which we feel ourselves the agents. This feeling of ourselves Alexander calls enjoyment, which is closely akin to what James meant when he described the animal warmth of our own experience. Enjoyment owes its origin to our sense of our own body, which supplies the continuity necessary for personal identity and consciousness thereof. In these terms, Alexander defends the thesis that freedom is the "experience which each thing has of the working of its own nature." In this matter Alexander aligns himself, generally speaking, with Spinoza and the idealistic moralists, for his view of freedom

admits no indeterminism. Freedom is determination of which we are aware in enjoyment. It is quite at home in a closed universe.

The *nisus* of space-time is not reflective nor even mental in character. None the less space-time "elaborates without forethought a 'hierarchy of ministration' which if it were produced by mind would imply a vast or all-wise forethought or providence." In the course of evolution some types of life are crushed by others. "Competition is the means to the supremacy of the adapted over the unadapted types and brings value into being by the rejection of unvalue. Deity, the new emergent, arises as the outcome of the onward sweep of all that is persistent and counts in the economy of the world." Thus by a sort of blind natural selection space-time perfects the type of its offspring. This is, for us, a very important aspect of Alexander's system, because it marks one of his principle points of difference from Henri Bergson.

We have seen that the restless productivity of primordial motion, inspired though it is by the *nisus* toward deity, is unreflective and unconscious. Here, as we shall see shortly, lies the root of all of Alexander's great difficulties. On the question, is there mind at the root of things? Alexander comments:

" . . . We who ask the question are products of the process of creation, and we dare not speak of the universe in terms of its parts. . . . If we think of the world as primordially a spirit, and not less of a spirit than ourselves but more of one, as we necessarily do if we indulge in such description as I have named, we are not securing simplicity, but only interpreting the simple by the complex. The simple world (the ultimate) may still contain its analogue to mind, but that mind will be more and not less elementary than ours."<sup>6</sup>

As a matter of fact, Alexander's primordial stuff is *very* elementary. It is little more than chance hypostatized, the restlessness of motion. Alexander has come to realize the desperate outcome of such reasoning. Upon his own admission, he fails to understand how repetitive, generic universals are possible. Why there should be a pervading repetition of embodied patterns throughout nature he fails to see. No philosopher can be said to have arrived at even the most tentative conclusions who fails to commit himself upon so central and fundamental a problem as this which is after all the Platonic question of the one and the many.

But even if we ignore this fundamental difficulty which in itself quite shatters Alexander's philosophy, we may conclude that his theory of

<sup>6</sup> "Artistic Creation and Cosmic Creation," *Proceedings of the British Academy*, Vol. 13 (1927), p. 18.

emergence is either a materialism or a theory of irrational creation. If the novelty produced in emergence is merely qualitative, a secondary quality "supported" by the determinism of primordial motion, we have a philosophy of a familiar type, one that reduces life and mind to epiphenomena. But if, as Alexander insists, the theory of emergence is not a materialism, if it really includes a non-reflective, pseudo-telic production of novelty, it can be little more than the loosest mysticism. To say that primordial, restless motion stumbles upon life and mind by a sort of natural selection would be materialism, but to "explain" development by recourse to a *nisus*, a direction, whose mode of entry into concretion is left wholly unaccounted for is to wallow in ambiguous verbalism. Both of these profound difficulties might be avoided, if Alexander would overcome his hesitation to find mind at the root of things. Then an esthetic theory of creation might easily be interwoven with his theory of emergence. Strangely, Alexander has been upon the very verge of such a doctrine. When employing what he calls the "human metaphor," he has called time the mind of space. If he could take this statement literally, there would be no difficulty in clarifying the persistent obscurities.

Indeed to maintain that time is the mind of space, is not necessarily to sink into a bog of animistic confusion. The immanence of past in present, and of future in present, both of which together constitute the immanence of natural law in its embodiment, seems really to be the essence of mind, except that mind succeeds also in contrasting law with flux that does *not* embody it. In a most significant sense, mind is the union of the transitory and the abiding. Indication and explanation, revealing the "this" and the "what," presence and essence, seem proper to mind.

If I am interrupted suddenly in the middle of a sentence, my hearers easily indicate my last word—they may also be able to grasp the trend of the incomplete sentence, for essence hovers over existence and process is always richer than its actual embodiment. If this last were not true, time really would be as Descartes supposed it, and the past would perish leaving not a wrack behind, the world being constantly re-created. Alexander has maintained that space alone is sufficient to insure process against such atomism. But this is a superficial view, space is only the general form of the concrete and not a principle of production necessitating the survival of the past. As we know, Alexander virtually admits this when he airs his doubts concerning the ground of repetitive uni-



versals. Bergson's doctrine of memory might offer welcome aid in such a predicament. Alexander's philosophy of emergence must advance to a philosophy of creation or perish by the road.

The relation of creation to conception is brought into prominence by the startling theory of Benedetto Croce. This theory of creation centers about the doctrine that will and creation are identical. Croce seems to accept James' theory of motor-consciousness to support this doctrine. All will is therefore physical in the sense that it is inseparable from the performance of physical acts.<sup>6</sup>

"As poetry lives in speech and painting in colors, so the will lives in actions, not because the one is in the other as in an envelope, but because the one is the other and without the other would be mutilated and indeed inconceivable."

Furthermore we do not contemplate possible procedure in the form of an abstract plan and *then* will some concrete act to initiate the plan's embodiment. Execution and volition and understanding are never really separated, although at times the illusion that they are distinct arises. This illusion is to be explained as follows.

"A volitional act . . . may declare itself again and again begin its work (although this will always be more or less modified) and this may give occasion to new interruptions and new beginnings." Hence, since will may declare itself and be thwarted so that volition appears with a negligible minimum of execution, we come in thought to separate the two. Croce goes further and denies that there is such a thing as an abstract conception of a piece of work before its production. Hence there is no willing of the work in general before its concrete emergence. Here a simple distinction will aid us. There is, to be sure, no concept of the complete, concrete achievement: that does not exist nor is its essential structure determined. But although there are no concepts *of* the work, there are concepts that are to go *into* the work. These are sometimes selected and in a sense willed. Croce is not unaware of the existence of such material. He speaks of it later as the *basis* of will. But he does not realize that in doing so he is admitting concepts into the process of creation, which synthesizes them. These concepts we have already described as the theoretical aspect of creation. Croce is much too willing

<sup>6</sup> From Croce's *Philosophy of the Practical, Economic, and Ethic*, Ainslie's translation, London, 1913, p. 75. By permission of The Macmillan Company, publishers.

<sup>7</sup> *Ibid.*, pp. 77-8.

to separate theory sharply from practice, or even to make it wholly dependent on practice.<sup>8</sup>

Nor are these concepts which enter creation mere conventions, maxims and standards.<sup>9</sup> When the latter are present in force we rarely create at all, but pass into a routine. The concepts are the *generative ideas* of the French creationists, whose wisdom Croce ignores.

Furthermore, we can well imagine the retort that unless conception and will are different, no missteps or errors are possible in art, theory or practice. The contrast between the indistinct promise of conception and the firm outline of concrete achievement is always present in the agent's mind. Of course, the original conceptual envisagement has its intuitive aspect as does all mental activity. (See above, p. 100.) In a sense, it is creative, and in a sense it is execution. But there is a difference between such preliminary execution and that which finally produces a work of art, completely embodied in its medium and coherent. To deny this obvious distinction is to ignore the structure of the few creative processes with which we are directly acquainted.

Again, Croce insists that the object of will is the act of will itself. Spirit wills or creates itself. This act of self-creation, springs from a *basis*, which may be called the *means*, the end being the complete act itself. The basis is the theoretic "material" at hand when the act of will emerges. The basis is the knowledge of the situation, and the attitude toward it which supports the act of will. Each act of will is unique but it could not be what it is, if it were not for its particular basis.<sup>10</sup>

To call the basis the means is a daring step, which carries Croce far into the depths of his obscure and almost perverse metaphysics. His theory in this case seems to be built upon the most inadequate observation. The basis, as he defines it, is certainly not all means-to-end. A distinction, or better many distinctions, between ends and means may be drawn between the elements composing such a basis. There will be therein knowledge of actual fact and recognition of aims, values, desires, and perhaps obligations. Certainly in such a broad selection of entities the distinction between end and means will appear. Aspects of the situation will seem fortunate because of their relevance to the realization of certain ends, and so on. This fact Croce has scorned to consider.

Indeed his theory seems disembodied and remote from observation. Thus Croce cannot give us an account of creative process comparable to Bergson's esthetic theory. He is unable to make creation a teleological

<sup>8</sup> *ibid.*, p. 46.

<sup>9</sup> *ibid.*, p. 110.

<sup>10</sup> *ibid.*, Part I, Chap. III.

activity, for once he has identified the end of will with the act of will, no end that can in any sense be aimed at is admitted. It is, of course, true that all really creative activity "surprises itself" with its outcome. We have labored that point sufficiently. But to recognize this contingent or spontaneous moment of creation does not involve denying the significance, much less the existence, of "esthetic conception" or the first envisaging of things worth, let us say, writing about or worth painting. The doctrine of the unity of the spirit although preferable to the mechanical departmentalizing of mind ought not to be allowed to reduce our view of thought to a flat, homogeneous picture. Its various structure should not be ignored.

## 3

Application of the theory of creation to the Platonic problem of the one and the many is the theme of Giovanni Gentile's philosophy. We shall find that it is also the origin of many of A. N. Whitehead's doctrines. Gentile, however, approaches the problem from the point of view of an Hegelian who has become convinced of the final reality of change and of time. Gentile has in his *Theory of Mind as Pure Act* gone far toward convincing us that apart from mental production no reconciliation of abstract and concrete is possible.

Perhaps unfairly, Gentile censures Platonism for its twilight account of the concrete world. His account seems somewhat to underestimate the doctrine of *Timaeus*.<sup>11</sup>

"Yet even for Plato there is a material element which in nature is added to the pure ideal forms without disturbing their motionless perfection. But this matter is precisely what from the Platonic standpoint is never made intelligible. Plato says it is non-being. It is something for which in thought's paint-box there are no colors, since whatever is presented to thought and therefore exists for it, is idea. And what can *Genesis* itself be, in its eternal truth, but idea? It would not be, were it not idea."

Nor does Aristotle's doctrine of the individual escape Plato's difficulty. For Aristotle is in the end unable to describe real change or becoming. He speaks of actuality and of potentiality but the two are not united. He is unable to show how nature passes from one to the other.

"It is shown, indeed, that the individual we would distinguish from the idea, is distinguished as the process of realization (is distinguished)

<sup>11</sup> From Gentile's *Theory of Mind as Pure Act*, Carr's translation, London, 1922, pp. 46-7. By permission of The Macmillan Company, publishers.

from the reality which the idea will be. But this process of realization, as we have seen, from the Aristotelian standpoint, which coincides with the Platonic in making the reality thought of a presupposition of the thinking, is inconceivable except insofar as it has yet to begin (potency, matter), or is already exhausted (act, form)."<sup>12</sup> The process which is the individual is missed by Aristotle quite as much as by Plato.

We have already seen what an outcome this weakness brought upon European philosophy. The static view of things, so engendered, Gentile is eager to avoid, as eager as Bergson or any of the French creationists. Gentile finds in the act of thought the reconciliation of abstract and particular, which constitutes the individual. This union of the two opposites is pure act, outside of which nothing exists. Abstractions, taken alone, lack reality. Particular events lack ideality or true reality, i.e. significance or relation to a world. Only in fusion of the two is there actual existence.<sup>13</sup> Psychic activity, active appreciation and understanding, as opposed to the more passive forms of response, offers this fusion and hence such psychic process is recognized as real or individual. Just as the *Divine Comedy* exists as a work of art only for those who can re-create it in appreciation, so the world exists only in individualizing acts of thought.

There can be no doubt that Gentile has caught very well the spirit of creationist thought. His ontology is a masterpiece, a clear and energetic statement of the indispensable nucleus of creationist philosophy. On the other hand his cosmology can only leave the student in pained uncertainty, for here Gentile's meaning is very hard to come upon. The emphasis upon actual, concrete thought as the only reality leaves us puzzled with regard to the status of pure possibility, particularly since Gentile seems to allow no supreme mind as the ground of possibility. How reality can be completely actual and still creatively productive remains obscure. Creative production seems to require an unrealized possibility—something "to be created"—while for Gentile all universals must be actually individualized in order to be present at all upon the metaphysical scene. Now, if there is no sheer possibility, creation must be a bolt from the blue—veritable creation out of nothing.

To say that Gentile is unaware of this essential aspect of creation would seem perhaps too bold an assertion. But certainly he has made no explicit effort to meet the situation and to avoid the difficulties which to some thinkers seem so obviously to lie in his path.

<sup>12</sup> *ibid.*, p. 59.

<sup>13</sup> *ibid.*, p. 101.

## WHITEHEAD'S PHILOSOPHY OF ORGANISM

THE type of philosophy which we have sketched in the later pages of our essay on Bergson is sufficiently similar to that of Professor Whitehead to warrant comparison. In fact we shall find that the traditions of the philosophy of creation are considerably furthered in Whitehead's work. That Whitehead's philosophy is united with the Bergsonian tradition becomes evident from a passage such as this:<sup>1</sup>

"The creativity of the world is the throbbing emotion of the past hurling itself into a new transcendent fact. It is the flying dart, of which Lucretius speaks, hurled beyond the bounds of the world."

The past is entering into novelty which transcends the world. This is Bergson once more, but we shall find a Bergson disciplined by analytical logic and possessing a wholesome sense of balance which prevents his relegating any aspect of human interest and activity to the status of illusion. In fact, Whitehead has said that it has been one of his pre-occupations to rescue the philosophy of Bergson—along with that of James and of Dewey—from the dangers of anti-intellectualism.<sup>2</sup>

Professor Whitehead has discarded a static interpretation of reality. He does not believe that the universe of all history is one great system whose essence we cannot grasp without comprehending the full nature of the self-contained whole. This he denies despite the fact that relations pertaining within universal types and within actual entities of structure seem to be internal. These relations may be considered essential to the universals, most universal patterns containing other patterns within them, just as the structure of a general's plans involves certain possible movements of his battalions.

But for Whitehead, this interlocking of universals does not commit us to an absolutist position. According to him eternal objects (his term for universals: his examples are a certain shade of color and the shape *sphere*) may be treated by the student in either of two ways. The student may point to the individual essence of the object or he may examine

<sup>1</sup> From Whitehead's *Adventures of Ideas*, New York, 1933, p. 227. By permission of The Macmillan Company, publishers. <sup>2</sup> *Process and Reality*, New York, 1929, p. vii.

its relational essence. In the latter case he will discover and catalogue the other eternal objects that are combined in the pattern of the object in question. They are terms in the relations pertaining to the object's mode of ingress into actuality, its so-called "status." Various selections from these must be procured, so to speak, or realized, if we wish to actualize the eternal object itself.

Analysis of relational essence may be carried on, theoretically speaking, until simple eternal objects are discovered beyond which analysis is impossible. Whitehead mentions distinct shades of color as such simple objects.

In the actual concrete world there exists a togetherness of interrelated eternal objects. This, however, is not true of the realm of possibility where relational essence is not actual connection. Here objects can exist in abrupt isolation. (See above, p. x.) Systems of relational essences have not been "woven together."

Individual essence is distinct from relational essence. Thus when by analysis we find eternal objects containing others within them, we are not studying the individual essences of the objects. These essences are unique and are not to be apprehended solely through reference to other objects. Individual essence is exemplified in our example of the general's plan of attack, considered as transcending and organizing the potentialities of warfare resident in his regiments.

The same individuality is to be found in concrete occasions. The occasion or minimal event is the offspring of creative activity, through which eternal objects are drawn together. (An enduring object is a continuous characteristic of many occasions, just as my *self* is an enduring characteristic of many pulses of thought and feeling.) It is this esthetic process, thinks Whitehead, which philosophers ignore who see in the metaphysical situation only static elements.

Whitehead's cosmology is based upon this doctrine of universal and concrete being, which we have described. In his *Religion in the Making* occurs a compact account of this cosmology, where the central concepts are arranged in brief presentation.<sup>8</sup> The analysis considers, 1, the actual world passing in time, and, 2, those elements that go into its formation. We have already noted the relation of the actual world to the eternal objects which are its constitutive elements. In order to account for the way in which eternal objects enter the actual world, Whitehead adds, 3, a further formative element to his philosophy. This element is God.

<sup>8</sup> *Religion in the Making*, New York, 1926, pp. 89-90.

In esthetic creativity, which is for Whitehead the substantial stuff of things, eternal objects are united and particular things, creatures, emerge. Creatures, or epochal occasions, are paths of historical continuity in creation. There is order in the ever changing community of epochal occasions. The "measure" of this "esthetic consistency" is God.<sup>4</sup> God is the actual but non-temporal entity whereby the indetermination of mere creativity is transmuted into a determinate freedom. This determinate consistency is said to derive from God's immanence.

The movement of creation is an elaborate one. Novelty must conform with the pattern of the epochal occasions among which it takes place, with those occasions which constitute its temporal background. It thus starts with something given which it will either enrich or impoverish, leave undeveloped or destroy. The novelty itself comes to be through a creative process which culminates in what Whitehead calls (realized) value or *satisfaction*, following which comes decision or redirection toward further value. The redirection is adapted to the new situation existent among epochal occasions. God is the principle of concretion which modifies creativity in such decision. He thus imparts the initial direction to every creative event.

God is, however, not creativity nor the world creating itself. He is a unity of uncreated value, immanent in creativity. He is to be contrasted with the world in which unity and coherence of value is lacking. Without him there would be no order in creation. Without him there would be no realized value, for there would be no concrete world. Eternal objects would, so to say, play leapfrog in heaven and would assume no fully coherent order of interrelation. As A. E. Taylor has indicated, God, so conceived, is not introduced merely as the source of order and "plan" in the world.<sup>5</sup> In this respect, Whitehead has not reproduced the old cosmological argument for the existence of God. The question is not primarily, why order? Why regularity in change? It is rather, why actuality?

"Unlimited possibility and abstract creativity can procure nothing."<sup>6</sup> The metaphysical dice must be loaded, if ever we can expect a world of actual "togetherness" to arise out of the conceptual "abruptness" of possibility.

The doctrine of creation introduces a real freedom and independence of finite beings and agents. This phase of Whitehead's doctrine is mani-

<sup>4</sup> *Religion in the Making*, p. 99.

<sup>5</sup> A. E. Taylor, "Theism," in *Encyclopedia of Religion and Ethics*.

<sup>6</sup> From Whitehead's *Religion in the Making*, p. 152. By permission of The Macmillan Company, publishers.

fest when we examine his work from the point of view of the problem of internal and external relations.

An internal relation is one that "makes a difference" to its terms, or one without which the terms would not be what they are. In other words, remove an internal relation from a nexus and the terms lose more than a *relation*; they are essentially altered. An external relation is a relation between terms, for which removal of the relation does not have this effect, or—if we face a situation which cannot actually be altered—for which *ignoring* of the relation does not essentially alter our understanding of the terms.

Whitehead does not slight internality. The world, he believes, is shot through and through with internal relations. On the other hand there are individual, finite entities. Thus my decision upon some problem may, as such an entity, be a contribution to the world of concrete individuals rather than a mere member of an organic whole. It is, in a sense, externally related to the world. On the other hand, even though my decision is a contribution it would not be what it is, if some of my fellow men in a certain situation had made decisions other than those that they actually did make. My decision is thus, in another sense, internally related to its environment: it must conform to a world which other decisions have influenced.

Now, all actual entities, of which my decision is one, are prehensions of the whole universe—an entity *is* the whole universe in a unique concentration. This concentration is *causa sui*. It is an esthetic organization, the fulfilment of a subjective aim. There is no one such organization which includes the whole universe past and future in all its history and development. Every satisfaction or concentration reintroduces its own subjective aim and process toward new fulfilment.

Whitehead has entrenched this position very thoroughly and consistently. He virtually admits that one actual entity does not include other actual entities in its universe of internality. It includes the entities' ingredients, the eternal objects entering the concrete through the actual entities, but not the entities themselves. This he expresses by saying that every actuality transcends all other actual entities. This is because the individual essence of an entity is not involved in prehension by other entities.

This doctrine is presented as the "categorical obligation" of freedom and determination.

"This category can be condensed into the formula that in each concrescence whatever is determinable is determined, but that there is



always room for the decision of the subject-superject of that concrecence. This subject-superject is the universe in that synthesis, and beyond it there is non-entity.” Thus every actual entity *is* the universe in one of its multifarious phases. Within that phase, as within the absolute of the idealists, internality reigns supreme. But the relation of one concentration to another is external for the passage from one to another is creative.

Thus we see that the past is not one system of organic internality, but each actuality, once actual, is such a system, involving in itself the relational essences of its past actual entities. With its contemporary occasions no entity is in *causal* relation. In fact, the definition of the contemporaneous involves the absence of such relations. But although not in causal relation, contemporaneous entities are in space forming together an extensive continuum, whose togetherness conceals the “incurably atomic” nature of occasions.

Thus Whitehead proposes to wind his way through the intricacies and dangers of the problem of internal and external relations, very much as Plato steered a course between the extreme philosophies of Parmenides and Heraclitus—largely by drawing a sharp distinction between concrete and abstract—between actual entities and their ingredient essences.

By his emphasis upon individual essence Whitehead has given us an atomism whose members interpenetrate one with another! He has carried the philosophy of creation toward a brilliant culmination by combining with the productive contingency of Bergson the independence of the finite individual. In Whitehead’s hands the philosophy of creation clearly distinguishes itself from a temporalist monism of constant creation.

This is the kernel of Whitehead’s philosophical achievement. Let us turn in the sequel to some of the more important details of his intricate system.

## 2

The most interesting comment that can be made upon Bergson’s esthetic theory concerns the return toward Platonism so clearly evident in its development. Hardly anything could be more anti-Platonic than the theory of irrational duration. According to the esthetic theory, action-patterns, in whose formation intellect has had a hand, enter into the flux of duration and are indispensable to creation. The resemblance to the doctrine of *Timaeus* is not to be denied. The Demiurge (mind = mem-

<sup>7</sup> From Whitehead’s *Process and Reality*, p. 41. By permission of The Macmillan Company, publishers.

ory) embodies the forms in the actual world of becoming. Thus the creationist philosophy of recent years begins to reveal its Platonic affinities. This tendency is strong in Whitehead's thought. Whitehead himself realizes this resemblance to Platonism and has gone so far as to assert that the history of western philosophy has been nothing more than "adding footnotes to Plato." It is further significant to notice that Alexander's failure is owing to his repudiation of the Platonic metaphysic, the realism of universals. This failure becomes manifest when he confesses that in his system he can offer no explanation of the fact of repetition.

The essence of the Platonic metaphysic lies in its answer to the problem of the one and the many. Platonism advances the doctrine of participation to explain the relation of universal and particular. The world escapes chaos and unintelligibility because events in the flux of becoming in some way participate in forms or patterns of structure which reappear elsewhere in the flux. Hume's philosophy, dominated as it is by the notion of empirical observation, denies that any such bond between universal and particular exists. Thus the new Platonism is an answer to Hume, just as Platonism itself is an answer to Heraclitus and the Sophists. This recent answer differs sharply from the Kantian, according to which a minimum of order is recognized as a *sine qua non* of possible experience. The modern Platonist replies to such a theory that, after all, being is more fundamental than knowledge and that the crux of the problem of the one and the many lies in the possibility of structure and of repetition rather than in the possibility of knowledge. Philosophy must face the problem of being as well as that of knowing.

The new Platonism is also the new creationism. In terms of the theory of esthetic creation this philosophy answers the problem by which Plato was so sore beset in *Parmenides*: Just how are forms related to particulars? We might call the new theory that of "esthetic participation" but Whitehead has named this type of relation "objectification" and we shall follow his terminology.

The relation of form to event is the relation of Bergson's action pattern to flux of becoming. It is, briefly, the relation of creative embodiment. This relation is the keystone of Whitehead's metaphysical scheme according to which reality is divided into three parts. There are (1) the primordial nature of God, the conceptual apprehension of Platonic Ideas, (2) the actual world, the "historic route of actual occasions," and finally (3) the consequent nature of God which is God's judgment upon the world and the guidance which arises from this judgment. Once the

relation between the three realms is clear, the skeletal outline of Whitehead's philosophy is manifest.

God is the organ of novelty, aiming at intensification. This is true of all God's functions: it is true of his primordial and of his consequent nature.<sup>8</sup> Intensification is the enrichment of being. It is similar in meaning to the term concentration which we introduced when discussing the true nature of intuition. It might be called wealth of meaning or of significance.<sup>9</sup> The appetite for intensification is directed toward monadic realization, that is, individual centers of intensification are desired, not one creature but many. The height of esthetic intensity is achieved in a whole where the constitutive parts possess an individuality of their own to which the whole pattern contributes, the parts themselves drawing strength from their position in the whole which, in turn, cannot stand without its parts.<sup>10</sup> We might suggest that the idea of organism does not do complete justice to this ideal, for here surely the parts and organs are subordinate, even when, as not always, they are indispensable. A personality rich in compatible interests and pursuits stands nearer the ideal, for here each constitutive part has a real life of its own.

In the primordial nature the Demiurge contemplates the good. Whitehead does not speak of the Form of the good but his discussion of intensification tells us clearly enough what his notion of the good is, which is reflected throughout the members of the hierarchy of forms. God's primordial nature is purely conceptual and lacking in actuality. It faces fathomless and unnumbered possibilities which subsist in unrealized and abrupt form. Since these possibilities exist without benefit of creative fusion with actuality they can be nothing but isolated skeletal catalogues, ways in which creation may attempt to proceed, i.e. ways in which no impossibility is implicit as it is in the notion of a perpetual motion machine.

" . . . The many eternal objects conceived in their bare isolated multiplicity lack any existent character."<sup>11</sup> They are impotent formalities. But God's prehension of these objects gives them power to enter the actual world. Thus God is like *mind* in Plato's *Philebus*, the link between abstract and actual. Aside from the urge toward realization of intensity, which is God's attitude toward the objects, they are only logical entities. Perhaps this is why Whitehead has called God's conceptual vision crea-

<sup>8</sup> *Process and Reality*, pp. 104 and 424.

<sup>9</sup> *ibid.*, p. 128.

<sup>10</sup> *Adventures of Ideas*, p. 364.

<sup>11</sup> *Process and Reality*, p. 530.

tive.<sup>12</sup> We shall see shortly that there is some difficulty in maintaining, as Whitehead does, that the primordial nature is both creative and eternal.

Every actual entity is metaphysically amphibious. It is the union of two worlds, the temporal world and the world of "autonomous valuation" which constitutes God's prehension of the Ideas. This union makes possible God's creative influence, his power in the actual world. The primordial nature of God is the source of the original inspiration of every concrescent actuality. It is the source of the first assumption of direction which a motion toward concretion accepts.

The primordial nature does not presuppose the particulars of an actual world. Rather the actual world presupposes the primordial nature of God. There are many primordial visions of value which do not pass into concrescence. Only, so to speak, when contact can be established between original vision of value and concrete opportunity does a member of the primordial nature initiate definite concrescence. But the primordial nature itself does not determine which of these value possibilities shall in fact be actualized in the flow of events.

Whitehead has summarized this situation as follows: "... We can say that God and the actual world jointly constitute the character of the creativity for the initial phase of the novel concrescence. The subject, thus constituted is the autonomous master of its own concrescence into subject-superject."<sup>13</sup>

The primordial appetitions are unmoved by the love of this particular or that particular. It is only in the consequent nature of God that we find individuals recognized and their value cherished.

This recognition of concrete value is God's consciousness, his judgment. If, by a distinction of reason, we consider the primordial nature apart from this judgment, we must call it unconscious, a scheme of abstract values, hovering darkly behind all judgment of concrete worth. Thus the primordial nature is eternal, unconscious, and creative. (We shall say more presently concerning Whitehead's theory of consciousness—suffice it now to comment that for Whitehead consciousness is essentially the awareness of alternatives, comparison of what is given with what might be given.)

The student will notice that Whitehead's account of God's primordial nature corresponds with what we have described, when developing Bergson's esthetic theory, as the theoretic moment of creation. There is,

<sup>12</sup> *ibid.*, p. 522.

<sup>13</sup> *ibid.*, p. 374.

however, an important difference between Whitehead's thought and the implications of Bergson's esthetic doctrine. Whitehead has described the primordial nature as eternal, the entire hierarchy of eternal objects standing eternally before God's conceptual evaluation. On the other hand, following the implications of Bergson's doctrine of memory, we find that creative process may *produce* plans or patterns, as it produces concrete individuals and, since this is the case, we hesitate to describe these patterns as eternal. To be sure, granted the existence of simple forms, or simple eternal objects, a survey of all possibilities based upon them is not unthinkable. But we hardly expect to find creation proceeding in such a mechanical fashion. After all, the genuine togetherness of the patterns drawn into combinations can only be effected by creative fusion. Whitehead seems to realize this when he calls the primordial nature a creative act—but, unfortunately, in the same breath he calls it eternal. This seems, in our opinion, to comprise a union of incompatibles. We may call the primordial nature an eternal element in creativity, its primordial accident, but this is not to say that its complex eternal objects are created; unless, indeed, they are produced in a process and in this case they can hardly be called eternal.

The creation of a new possibility arises from a problem set by a concrete impasse. It is the response of creative wit which must employ already subsistent possibility as material for the new "manner of go." To say that no possibility is so produced but that all possibility is eternally subsistent, is to argue that all problems are eternally solved, in an unconscious wisdom, the realm of possibility then being a sort of cosmic manual. This introduces a new sort of creation which is not a matter of process. This type of creation seems unnecessarily to complicate our metaphysical scheme. But we must argue the point more thoroughly and refrain from too hasty a use of Occam's razor.

Such exhaustive compresence of subsistent possibility has been damned in no qualified fashion by Professor Hocking.

"It is an eternal reservoir of all potential thought and all potential being. But I fear that the phrase, 'all the meanings' is the perfect model of a meaningless phrase. A musician's repertory consists of a finite number of musical works which he can render: add to this repertory all the other possible combinations of notes and you destroy it. You have returned all the statues to the quarry and lost them in the original rock. It is no reservoir of potential being: it is the barren infinitude of meaningless illation."<sup>14</sup>

<sup>14</sup> *Proceedings of Sixth International Congress of Philosophy*, p. 212.

Hocking states his own view in this matter as follows :

"In the free action of mind there is a genuine addition to being. If the world of the possible were that alleged eternal and infinite reservoir of essences, there could be no genuine creation or novelty: action would be limited to marking out certain preexistent ideas as candidates for being. But when we see that the genuinely possible is only what is conceived possible, every hitherto unthought of possibility appears as an absolute creation. The mind adds to the actual by first adding to the possible. In this view of things, art acquires a new importance for the constitution of the future world—it is one of the major avenues of metaphysical birth."<sup>15</sup> By insisting upon the subsistence of an exhaustive, eternal possibility, Whitehead reduces creation to selection from a catalogue. (This point has been made clear by Miss Emmett<sup>16</sup> in her study of Whitehead's philosophy.)

We hope to show by the following reasoning that Hocking's general attitude toward possibility is sounder than Whitehead's. In the first place we can dispense with the notion of God's unconscious evaluation which is essential to the primordial nature, as Whitehead describes it, and in the second we find that Bergson's doctrine of memory does away with the need of an eternal creation of possibility.

The primordial nature of God cannot be unconscious prehension of possibility in general, because it involves a special type of valuation which is necessarily conscious. For God, evaluation amounts to a comparison of the forms contemplated with himself, for God is his own archetype of perfection. He is the truly autonomous agent and he wills to embody such agency among his creatures. Whitehead has not expressed this doctrine explicitly. Still reflection upon his ideal of esthetic intensification should make clear that the doctrine is consistent with his system. We have already shown the relevance of strength of personality to this ideal. Now, when we see that a comparison and contrast of the object evaluated with himself, is essential to God's appraisal of any object, we realize that such action is for God the very quintessence of consciousness, a comparative recognition of self and not-self. Hence the primordial nature is conscious evaluation.

Turning to the second point, we must remember how Bergson has faced this problem fortified by his own doctrine of memory, whereby the past enriches the making of the future. Action patterns already developed may be drawn into the production of new forms of procedure.

<sup>15</sup> *ibid.*, p. 213.

<sup>16</sup> *Whitehead's Philosophy of Organism*, London, 1932, pp. 116 ff.

But even this great wealth of potentiality, drawn by selective memory from the past, this wisdom which renders life intelligible, is impotent to enrich the world and bring firmer and deeper values into actuality without constant creative transmutation as the past is absorbed in new creation. God grows in "technical wisdom" as his creation endures.

This constant, selective contact with the past is a much more comprehensible thing than an unconscious evaluation of eternal possibility. For the potentialities resident in past creation are not mere schemes of combination but genuine esthetic products, born of creative process.

Aside from the fact that possibilities have been created in process, they do not differ from eternal objects. All possibilities subsistent at a moment of creative decision, enjoy a certain relevance, more or less remote, to that decision. But we have no right to talk of possibility not yet created, it does not belong to the metaphysical scene. The production of the earliest single-celled organism bore no relation to the dinosaur, for there was no dinosaur, actual or potential. On the other hand, the pattern dinosaur, when produced, owes its possibility to what creation has made of the cell structure.

It may be urged that our discussion of possibility reduces that realm of being to actuality, for the reason that possibility is created—that it becomes. True, we admit that new possibility comes to be, but it becomes not actual but possible. After its creation, its own proper becoming, it may become actual by being fused with other possibility and brought into conformation with a concrete history; but its own coming to be is prior to this. There is a sort of "super-possibility" which stands to possibility as the latter stands to actuality. There is a process in which new possibility is created and this process enters a realm beyond possibility proper. Suggestion plays a part here as in all creation, but those entities carried forward by suggestion are themselves possibilities. However, there is a further element involved. The problem of the moment requires the envisagement of a possible procedure like those already envisaged but differing from these in some vital point. This unfulfilled requirement is a command laid upon creative ingenuity. This command may be called a "super-possibility." This we believe Professor Hocking has described in the following passage, although it is possible that he would object to the theological application of its principle.

"For the self holds to its vision of possible good with a *variable tenacity or insistence*." The capable manager . . . may not, in the course of a day, discover more needs nor see more men capable of filling those needs than the incapable manager. But the difference is that

the sight of a man in the capable mind falls upon a powerful current of affirmation—"You belong somewhere"; and the sight of a need strikes upon a strong current of belief to the effect, "This is to be met."<sup>17</sup> Such a picture has to be magnified to the outermost limit of conception to give us an inkling of divine activity. But we need not make of the difference, enormous as it is, a difference of kind. It must remain one of degree.

But how does an unrealized eternal object alter the state of affairs in the concrete world? In other words just how does God's wisdom enter creatively and enrich the actual world? This is a fundamental problem for Whitehead to answer, for he has formulated a law, known as the "ontological principle" to the effect that all explanation of actualities must be rendered in terms of other actualities. The reasons for actual things are other actual things. "The ontological principle can be summarized as: no actual entity, then no reason."<sup>18</sup>

The ontological principle expresses Aristotle's criticism of the Platonic Forms. Manhood does not beget man; for that, a man is required. This principle once and for all fortifies Whitehead against Aristotle's criticism and it deepens his own philosophy in that it requires very thorough treatment of God's creative power. To explain this we must introduce a number of Whitehead's terms in more precise fashion than heretofore.

An actual entity is a center of completed creation, a particular fusion of patterns into a definite concretion. The entity or occasion is a Leibnizian monad seen through Bergsonian spectacles. It reflects the universe, but it is only a moment of existence, not an eternity. It is a moment of "spatialized" being, *natura naturata*, a bit of reality *tout donné*. In each occasion the eternal objects are embodied or excluded and through this embodiment other occasions<sup>19</sup> stand in relation to the given entity. These occasions and eternal objects are "prehended" by the given occasion. There are two types of prehension, positive and negative. Negative prehension of an eternal object excludes it from influence through positive prehension of an incompatible.

A positive prehension is called a *feeling*, which term must be stripped of its purely psychological connotation. A conscious feeling entertained by one of the higher organisms is a special form of feeling in general.

<sup>17</sup> *op. cit.*, p. 213.

<sup>18</sup> *Process and Reality*, p. 28.

<sup>19</sup> See above, p. 131, for limitations of the relation of one occasion or actual entity by another. The individual essence of the prehended entity is not involved.



A prehended eternal object or occasion is said to be "objectified" in the entity which prehends it.

Prehension of an eternal object or objects is conceptual, prehension of an actual entity or entities is physical. (The individual essence of the actual entity is not prehended.) Consciousness is shot through and through with conceptual feeling, the primitive data of perception being laden with eternal objects.

A pure physical feeling is the prehension of an occasion, or occasions, when the latter are objectified through one of their physical feelings. A hybrid physical feeling is the prehension of an occasion or occasions when the datum is objectified by one of its conceptual feelings. God's novel hybrid physical feelings when they are favorably evaluated by him are the foundations of progress and novelty in the concrete world.<sup>20</sup>

This brings us back to the ontological principle and the Aristotelian critique of Platonism. How can an eternal object, unrealized, a veritable abstraction, be "proximate" to an embodied eternal object and exercise an influence upon a concrete complex of such embodied objects? The answer is simply that it cannot do so by virtue of its own power. An abstraction cannot move a mountain or build a ship.

But by means of hybrid physical feelings production of novelty is possible even so. A hybrid physical feeling relates an actual entity, the subject, to another entity by means of a conceptual feeling, i.e. with reference to an "abstraction." This is Whitehead's way of describing what on the psychological level, James called association by similarity.<sup>21</sup>

If I am to empty a rowboat of water and fail to find my sponge, I may pick up a tin can for the purpose. In this case the can is related to the situation through some of the eternal objects embodied therein. I connect it with the sponge because of a similar function which it may fulfil. This is a hybrid physical feeling because the can is objectified in my thought through its conceptual feeling, namely, its prehension of certain eternal objects, in brief, its "containerness" and its size. However certain dimensions and the possibility of containing will not clean a boat of water, while an actual can will. But the eternal objects are connecting links between my problem and the can. When I fail to find a sponge, I seek for something that may be objectified

<sup>20</sup> *Process and Reality*, p. 377.

<sup>21</sup> James' *Psychology*, Vol. I, Chap. xiv.

in the occasion of my inquiry after a fashion in certain respects identical with that in which the sponge is objectified.

To solve this problem, I am subject to the procedure of suggestion which we have already described in another context. The eternal object involved in the hybrid physical feeling does not bail the boat but it assists the discovery of enduring objects which will. None the less, since physical feeling is necessary to suggest an actual instrument, there is reason to maintain that here conceptual origination of novelty arises from physical feeling, although in nature we cannot observe the connection of the two, and hence tend to speak of an abrupt emergence of novelty. Owing to this entertainment of hybrid feelings novelty enters nature. Evolution is creative because its direction, i.e. the direction of the very many occasions embodying it, may be inspired by God's hybrid feelings.

Thus even in creation of genuine novelty the ontological principle holds. For the process which gives birth to the novelty has for its "reason" the physical feeling which makes possible the suggestion upon which the apprehension of the novel form depends. And a physical feeling involves actuality. Thus embodied actuality may be traced down to other embodied actuality despite its creative origin.

For Whitehead supernatural intervention does not shatter the law-abiding continuity of nature. Efficient causation need not clash with final causation derived from God. There are two ways of studying the world, the genetic and the morphological. The structure of the concrete, considered as apart from creative production, is the object of morphological study. Thus under the heading of morphological investigation Whitehead includes his philosophy of geometry. For space, as in *Timaëus*, is the matrix of the actual. Genetic speculation on the other hand is concerned with the metaphysics of concrescence the passage, not from occasion to occasion, the route of efficient cause, but from unembodied eternal object to concrete "satisfaction." This is teleological, while the former is a matter of conformation. "Continuity concerns what is potential; whereas actuality is incurably atomic."<sup>22</sup> It is in terms of a potential continuity that scientific prediction is made. Prediction apprehends strands of conformation which carry on from occasion to occasion. The term *morphological* refers to the realm studied through the material elements which we have mentioned above, while the genetic realm is that of constitutive elements, which fuse in the production of a new entity.

<sup>22</sup> *Process and Reality*, p. 95.

The morphological realm is really quite as genuine, metaphysically speaking, as the genetic. Objects are genuinely connected in the concrete world, hence no extreme positivist account of science is necessary. Occasions have macrocosmic and microcosmic aspects. In their macrocosmic aspect they interfuse with the universe. As microcosms they enjoy an individual essence of their own. Here, of course, Whitehead is stating in his own way the important esthetic truth that individuality is a unique creation from material common to a world which the individual transcends. Owing to this material, the individual belongs to the world; in virtue of its creative origin the individual is a contribution to the world.

Physical measurement is a matter of morphology; here Whitehead is quite willing to allow the employment of the concept of space-time which seems to be required in modern physics and astronomy. This admission however does not mean that production of novelty is to be absorbed into a space-time which, philosophically speaking, is nearly identical with the eternity of many a rationalist metaphysics. The creative consciousness of God (see below: God's consequent nature) is in unison of duration with all incomplete creative process.<sup>23</sup> The existence of space-time does not appear until we try to consider one occasion from the point of view of another and measure the interval between them. Space-time belongs to the historic routes composed of occasions but not to the production of these occasions. To be sure, space-time as used to measure physical motion does extend into our future, assuming an aspect alarmingly similar to the static eternity of so many philosophies. But this may be treated as an aspect of "predictability." The strands of conformation which belong to space-time do not exhaust the wealth of the concrete. Like all forms of absolute continuity, space-time refers to potentiality. As that potentiality is realized, the atomic occasions appear in their creative origin.

" . . . The extensive space-time continuum is the fundamental aspect of the limitation laid upon abstract potentiality by the actual world."<sup>24</sup> It is the most general form of potentiality relevant to the actual world.

In connection with the above, Whitehead has argued that there is no continuity of becoming, although there is a becoming of continuity. Occasions conform to an environment, hence there is a becoming of continuity; but each occasion is an individual prehension of the world-situation, a distinct creation with a private essence of its own, hence

<sup>23</sup> *Process and Reality*, p. 523.

<sup>24</sup> *ibid.*, p. 123.

there is no continuity of becoming. This differs sharply from the Bergson who, in his extreme irrationalist mood, tried to banish discontinuity from his universe.

We must not consider this discontinuity without reference to its complementary truth, for the world is a system of prehensions and Bergson's interpenetration of states is united with the theory of discontinuity. For the past is taken up into the present, not certainly the inviolate telic individuality of the past, which like every actual entity transcends the world, but the body which, so to speak, supports that individuality.

The theory of occasions has been, in certain phases, developed as a direct counter to Hume's skeptical theory. No occasion is independent of an environment—in fact the occasion is an inclusion of its past environment under a new individual essence. Furthermore, experience of the concrete, no matter how rich in organization and self-contained it may be, always looks before and after. Even the occasion in its inward synthesis faces the future, for all that it is *causa sui*.

"The point to remember is that the fact that each individual occasion is transcended by the creative urge, belongs to the essential constitution of each such occasion. It is not an accident which is irrelevant to the completed constitution of any such occasion."<sup>25</sup>

Every occasion accepts its predecessors as "stubborn fact" and lays a limitation of "stubborn fact" upon its successors, thus leaving its mark upon the world. Of this important aspect of nature, we are directly aware in all perception, for there is a non-sensuous perception. This is our feeling of the incompleteness of the immediate presentation which comprises the stuff of experience.

This feeling of a "causal efficacy" may at times enter consciousness in a spectacular way, as it does in the vague "apprehension" felt by a man walking in a dark wood. Such expectancy in its less startling and more significant form leads us to look for outcomes and causes. In other words it withholds us from isolating the objects which we perceive and insists upon a dynamic environment. There is an "observed immanence of the past in the future."<sup>26</sup> This is one of our fundamental attitudes toward nature. It is the origin of science and of the intelligible experience upon which science is built.<sup>27</sup>

<sup>25</sup> *Adventures of Ideas*, p. 249.

<sup>26</sup> *ibid.*, p. 237.

<sup>27</sup> In *Process and Reality* we learn much of perception in the mode of causal efficacy, apparently a special case of non-sensuous perception. This is a perception of influence, usually spoken of with reference to the sense organs which we feel are influenced by

The topics above discussed belong properly to the first two divisions of Whitehead's philosophy, the primordial nature of God and the flux of things in the actual world. We have still to mention the consequent nature of God. This discussion will make possible further description of the actual world.

God's consequent nature is his judgment of the world.<sup>28</sup> In the primordial nature the value of eternal objects is prehended. In the consequent nature the creatures are recognized as embodiments of value. They are also recognized as sources of value beyond themselves. The interpenetration of states is manifest, and the objective immortality of the past is secured. In this way Whitehead expresses the immense importance of being actual.

We penetrate God's consequent nature when we "realize" the past in its present significance, as when we suddenly realize that the poem which we are reading really means something that we have long ago experienced, or more accurately, for the experience does not here produce the poem except that it makes us understand it—more accurately when we discover one writer echoing another or absorbing something from another and making it his own.

Whitehead insists that such experience enriches God not only because it heightens the esthetic value of creation, but because it enriches the primordial nature or primary apprehension of value and encompasses a transformation of his wisdom.<sup>29</sup> This transformation seems to be the envisagement of concrete or real value as opposed to the potential values of the primordial nature.

Thus God achieves new value through his work. The consequent nature with its discovery of value and its preservation of past achievement contrasted with present constitutes a conscious personality, just as interest and memory constitute personality among creatures. According to Whitehead, it is only in virtue of this consequent nature that God has consciousness and personality. The primordial nature by itself involves no consciousness. With this doctrine we have already taken exception. But, despite the difficulties mentioned, to speak of the primordial nature of God as unconscious is hardly so startling a doctrine as it may at first seem to the student. The primordial "concern" for intensity which underlies all movement toward concretion is analogous to human instinct

objects. The theory is used as a weapon against the doctrine of representative perception. See especially *Process and Reality*, p. 266.

<sup>28</sup> *Process and Reality*, pp. 523 ff.

<sup>29</sup> *ibid.*, p. 524.

or fundamental desire. These fundamental directions enter consciousness and present problems to it. They are not generated by consciousness; rather, they supply consciousness with something to be interested in. The primordial nature is thus a fundamental desiderative datum. That Whitehead terms this phase of God "conceptual" need be puzzling only to one who has not become familiar with our philosopher's radical terminology. The term means only that the objects of this fundamental desire are potentials. We have already objected to this doctrine on the grounds that the evaluated objects cannot be both eternal and created as Whitehead insists, and further that God's evaluation since it must involve a comparison and contrast of the object with himself must be conscious.

It is only the consequent nature that recognizes and cherishes concretions. But neither the primordial nor the consequent nature taken separately, offers a fair view of God's nature. Thus appetitive vision and physical enjoyment have equal claim to priority in creation, we must interpret God's real nature as an interaction of the two.

In God's nature, permanence is primordial, and flux derives from the world. For the world, the reverse is true, flux is primordial and permanence derives from God.<sup>80</sup> God and the world are the two opposite poles of creativity. They are both "in the grip" of creative process. Hence God is a primordial instance and not the source of creativity. Creativity is Spinoza's substance. God and the world are infinite modes, which however interact. God qualifies all creativity, but creativity is not to be ascribed solely to his volition.<sup>81</sup> The occasions enjoy an individual power of their own.

This is clearly the case in Whitehead's system. But we must remember that no creator, in any sense of the word save the old, popular theological one, is ever thought to produce with deliberative foresight exactly the situation that he has willed, for creative activity surpasses conceptual foresight. God is, as Whitehead says, the poet of the world and hence it would seem, in the truest sense of the word, its creator. But this statement will have to be examined for certain considerations have brought Whitehead to the conclusion, "It is as true to say that God creates the world, as that the world creates God."<sup>82</sup> This is one of six pairs of antitheses with which Whitehead complicates his exposition. This one is the most startling and, superficially speaking, the most perverse.

<sup>80</sup> *ibid.*, p. 529.

<sup>81</sup> *ibid.*, p. 344.

<sup>82</sup> *ibid.*, p. 528.

To understand this statement we must remember that the final plunge into actuality, the "decision of the subject-superject" is beyond any domination. Now, Whitehead treats the subject-superject as an independent entity, supplying its own autonomous direction. Thus the emergent subjects of the actual world through their syntheses contribute to God's consequent nature and thus the actual entities in the world exercise an influence upon God, for their decisions require that God respond to the new situation. This is clearly to present his personality with problems and thus influence his life. Now, since God does no more than initiate original direction in the concrescence of these entities, it seems as true to say that the world creates God, as that God creates the world.

The above is especially clear when we consider that Whitehead is willing to attribute decision to an occasion, using the word with sufficient emphasis upon its psychological connotation to justify his comparing it to divine decision. Whitehead's doctrine is similar to Leibniz' in this. Like Leibniz he distinguishes various grades of intensity as regards psychological characters and assigns lesser grades to events which we usually think of as quite below the psychic level. He describes them as capable of a measure of initiative, analogous to consciousness and moral decision<sup>33</sup> in man. He attributes this initiation to the forms of nature that are studied only in the physical sciences. Such an interpretation would allow to all forms of nature a life of freedom, differing only in degree from that which we have allowed conscious agents such as man.

Some thinkers might suggest that the concept of esthetic object applies equally well to such forms of nature, saving the appearances as thoroughly. Individual essence is allowed them and also indetermination of development, granted that they are genuine forms of nature and not material elements only. Furthermore, the use of this concept makes room for the doctrine, which seems at least plausible, that the organic freedom such as man enjoys is concomitant with the vast complexity of his nervous system, which makes choice and origination of action possible. This plausible hypothesis inclines us to prefer to limit creaturely choice to organisms possessing nervous systems. Thus we would consider other units as esthetic products possessing histories but without intrinsic origination of activity. These latter are like the development of an idea in a poem or like a character in a drama.

The esthetic product has individual essence and is thus a unique individual, but it need not be considered as itself initiating activity. Poems do not, strictly speaking, write themselves, although their mental pro-

<sup>33</sup> *Process and Reality*, p. 339.

duction may be rapid and spontaneous. This is clear from the fact that in some minds poems are produced, in others not. The possibility of their production depends upon the habits and memory of the artist. The initiative involved depends upon the purposes and desires of this mind. It is their expression and manifestation. Apart from the mind in which it is produced, an esthetic product has no power of initiative.

But I fear that such an attempt to interpret Whitehead's *occasion* as an esthetic object is not consistent with the genuine pluralism which he has envisaged. This is because the community of contemporary occasions is not a unity such as would seem necessary, if the creative advance were the direct product of one creative mind at each moment of its production. The "free play" which each occasion enjoys is not consistent with a monism, even of a creative monism.

"The causal independence of contemporary occasions is the ground for the freedom within the universe. The novelties which face the contemporary world are solved in isolation by the contemporary occasions. There is complete contemporary freedom. It is not true that whatever happens is immediately a condition laid upon everything else. Such a conception of complete mutual determination is an exaggeration of the community of the universe. The notions of 'sporadic occurrences' and of 'mutual irrelevance' have a real application to the nature of things."<sup>84</sup>

The universe is preserved from anarchy by the "stubborn fact" offered by each occasion's past to which the occasion must conform according to some decision embodying eternal objects.

If one is perturbed by the introduction of unconscious decision into philosophy, one may learn with satisfaction that even for Whitehead no feeling exists wholly apart from consciousness, for the consequent nature of God is in "unison of becoming" with every new creation. There seems to be a distant analogy between this situation and that of the author who strains for a pat expression: the author witnesses with varying degrees of approval a wealth of mental productivity which his desire has initiated, but phrases leap into shape with apparent autonomy. Thus the concept of esthetic object need not be considered wholly opposed to that of creaturely decision.

### 3

A detailed account of the intricacies of Whitehead's system we cannot here undertake. Nor can we consider all the topics which appear in his work, for he has submitted to examination almost every problem

<sup>84</sup> *Adventures of Ideas*, p. 255.



with which modern philosophy has been preoccupied. Let us present then a critical appreciation of two of Whitehead's central doctrines rather than attempt a more detailed survey.

We have seen that the theory of perception offers a solution of the problem of the one and the many. As a solution of this problem the theory appears at its best. But it is also advanced as a solution of another problem, one quite as persistent in modern thought, viz. the question of the relation of consciousness to nature. Whitehead has taken a stand clearly opposed to traditional dualism and has refused to recognize any "bifurcation of nature." The pan-psychist atmosphere of his system agrees with his repeated assertion that the phenomena of consciousness may easily be overemphasized by philosophers who tend to divide reality into the two great realms of thought and the object of thought.

It is, at least apparently, easy for Whitehead to deny this bifurcation because he has virtually woven it into his ontology before considering the problem of consciousness and of knowledge. His theory of mental and physical poles in creative process recognizes a dualism in nature, far more pervasive than the dualism of consciousness and the external world. Since occasions are objects for each other and, in themselves, subjects reacting to objective influence, there is, as Whitehead has himself asserted, significant dualism at the very heart of nature.<sup>85</sup> But there are other important dualisms as well, for instance that between eternal objects and concretion.

Now, the wisdom of such a treatment of consciousness as solidary with natural process is questionable, not perhaps from the point of view of rational consistency—at least we shall leave that question to Professor Lovejoy and to Professor Pratt, who are devoting much thought to its examination—but rather from the approach of the thinker concerned with the construction of a reasonable philosophy.

I follow Warner Fite in believing that man is no ordinary animal and that this is true because he knows that he is an animal. I should add that man is distinguished from nature primarily because he knows that there is such a thing, that he is in it and must some day leave it or dissolve into it. Further, a conscious being is not related to the laws of nature as a natural object or an unconscious animal is related. For, after all, there is nothing that can happen to a conscious being that may not, in general, be subject to his considered and voluntary choice. There is, in a sense, nothing that he *must* accept. It is not quixotic to say that consciousness does free man from nature, because he can and occa-

<sup>85</sup> *Adventures of Ideas*, p. 245.

sionally does choose to renounce or to desert nature rather than participate in some phase of natural process which he does not consider acceptable. Consciousness is *de jure* the arbiter of nature and this in a sense which it is ridiculous to predicate of unconscious occasions. Consciousness is the spectator of existence and a judge set above it.

Again, consciousness builds vast structures of interpretation of the world and its working. Science and philosophy are products of conscious ingenuity and these are set over against nature and painfully contrasted with it. Thus we rise above nature in the act of noting that consciousness may think of the world as being otherwise than it is. The occasion of the lowest order may "perceive" a law of nature but it cannot harbor and cultivate something that is not a law of nature but might have been; and thus the mere occasion is, even though an individual, limited by nature, while consciousness rides above it, albeit upon nature's back.

These considerations persuade us to "bifurcate" reality even more sharply than do some of Whitehead's opponents, and these thoughts invite us to introduce a distinction between nature and a supernatural consciousness.

Strange to say, it is not necessary to rework Whitehead's account of consciousness very materially to defend the stand thus taken. The importance lies in emphasis upon the genuine independence which consciousness entails. We need not argue for a Cartesian dualism. The point is not that consciousness reproduces nature and so builds up a private and subjective realm of its own, but rather that it responds to nature in a way which quite distinguishes it from other entities.

Whitehead's account of consciousness runs something as follows. Consciousness is a form of prehension, where eternal objects are referred to situations through propositions, the proposition being a datum of the prehension. The situations to which propositions refer eternal objects may be actual entities, or concrete patterns of such entities, or eternal objects. Conceptual feeling may be unconscious, in fact it so exists throughout vast reaches of nature. But when such prehension is enriched by propositions, consciousness emerges.<sup>86</sup>

Consciousness thus introduces manifest contrast. It sets actuality against a background of possibility.<sup>87</sup> Here lies the nucleus of conscious independence and the metaphysical foundation of the theory which we defend. Thus we need not condemn the admirable structure of White-

<sup>86</sup> *Process and Reality*, p. 391.

<sup>87</sup> *ibid.*, pp. 245, 399 and elsewhere.

head's hypotheses when we hesitate to accept his dictum that "relegates consciousness to a subordinate metaphysical position."<sup>88</sup>

It is true that consciousness is late in origin and that it has often to do with "high abstractions of merely pragmatic importance" which it mistakes for ultimate simplicities. But it is easy to overemphasize these epistemological considerations.

Again, it is true that there is a general continuity between human experience and physical occasions. Consciousness is a form of prehension and prehension is universal in nature. However, if we consider, not the background and foundation of consciousness, but its emergent outcome, we face another situation altogether.

Here consciousness appears as the arch-embodiment of esthetic intensity, where events contrast themselves with what they are not, and with what they might have been, and where many strands of activity become united in one center, in a personality, which evaluates them and holds them together, sustaining a rich and varied life. In a teleological philosophy, it does indeed seem strange to describe this highest embodiment of value as "metaphysically subordinate."

Aside from these difficulties just discussed, Whitehead's account of the relation of God to his creatures is admirable. We have seen that Whitehead finds it possible to attribute personality to God. This completes the Odyssey of the creative philosophy. With this doctrine speculation arrives at a completely "reasonable" theory. Whitehead's God seems to be the first God of metaphysics that can really be considered personal. He is not an eternity of accomplished achievement: he is not all-powerful, nor is he all knowing as regards the future. Still he is truly God, being the prime mover of mundane affairs and even the "shepherd of the sheep" concerned for the genuine well-being of his creatures.

Whitehead has found the most impressive of the divine attributes to be that of tolerance,<sup>89</sup> a patience which he might almost identify with a benign sense of humor. For God does not intervene in the struggle of forces as a champion taking up a cause. Rather he presides over the whole, turning his creatures toward value and cherishing whatever success they achieve, always initiating further movements, richer by the success which he has instigated. He is not the God of miracle and catastrophic intervention, but he is the God of history and development. His attitude is that of a patient father or teacher who does not ordain the

<sup>88</sup> *Process and Reality*, p. 211.

<sup>89</sup> *ibid.*, pp. 525-6.

course which those under him must follow but offers opportunity which they may be capable of grasping.

This guidance is not omnipotent and much value is by the very nature of the process sacrificed. The universe is open. Conflict is always present, this being inevitable in a world containing individuals who come only painfully to an understanding of their environment. But the root of evil in the world is the fact that the world is really transitory and that its elements emerge contingently passing beyond any universal foresight and control. To understand that degradation and destruction are not, in the creation of things, produced quite indifferently along with beauty and happiness is the intellectual approach to the spiritual experience of peace and acquiescence.

God's task is one of reconciliation. He must preserve harmony among the movement which he initiates. Thus philosophy plays a divine rôle among the tendencies of culture, for it both initiates and reconciles. The sciences have in the past received their primary direction and their first impetus from philosophy, and in the end it is philosophy that attempts to keep them from overwhelming other realms. Philosophy grasps notions such as that of "natural piety," the submission to natural fact, and thus initiates vast movements which in turn express their own freedom and often endanger or even overthrow the balance of power among the notions of culture. Philosophy must check the single-eyed enthusiasm which, if unbridled, moves toward an anarchy where each member claims to be paramount.

Now, the philosophy of creation is able to harmonize the notions involved in science and in the pursuit of happiness by relating them to the activity of a personal force which is no more than the successful hypostatization of human personality working its course among its besetting difficulties. For the first time in the history of western metaphysics, God is interpreted as really anthropomorphic. For the first time, God is really the author of existence—the poet of the world. He is Plato's Demiurge, free at last from the eternity which, for centuries of speculation, seemed to deluge his efforts with determinism. Man is free because God is human.

Indeed, this outcome might have been predicted in outline as the only one possible for a reasonable philosophy, solely by consideration of the notions which set the problems of speculation. The notions behind science and behind morals are united in man's practical activity. Man must

depend upon scientific order; recognition of its existence is essential to autonomous life. Without such recognition of order in things no prediction of the future is thinkable. However, in practical situations, man is always *employing* instances of scientific order. He never, in actual action, considers his own decisions as absorbed by a determinism. Here then in practical life we have an instance of autonomy and regularity united. But, of course, the metaphysical import of this union can only be defended after examination of the presuppositions involved. This has been the task of the philosophy of creation. The several thinkers have constructed dialectical concepts to embody the notion of practical freedom.

Once this is done, philosophy has to follow its usual course of applying the favored idea to ontology and subordinating all concepts to it. This process of application and subordination has been a slow one, requiring nearly a century of meditation from the days of Ravaisson to the present time. Full achievement of this end was really impossible before Whitehead reduced the central problem of pure metaphysics, the problem of the one and the many, to a solution in terms of creation, showing how God's creative power passes into the concrete world of many distinct things sustaining and directing without compelling.

God is the overlord of all creation, yet he has less power over his creatures than a human author has over his characters, which doctrine only reflects to the glory of God, revealing as it does that he is a greater creator than the human artist, since he can produce his own image in a measure that no other artist can dream of attaining. Evil appears contrary to God's will, and God is forever preoccupied with its elimination. Thus, insofar as it lies in the power of metaphysics to do so, the creative philosophy has accomplished that most formidable of intellectual tasks—to justify the ways of God to man.

But the conclusion of the philosophy of creation is of great significance even for those many clear-minded and honest people who realize that they are not profoundly concerned with any object of worship. The God of Whitehead and of Bergson insures the reality of human freedom, a notion to many quite as precious as any feeling of supernatural companionship. Thus, there are many who, being without the slightest inclination to worship, might echo the words if not the meaning of the Spanish poet: "Oh! God, if you exist, then do we exist indeed!"

## OBJECTIONS AND ALTERNATIVES

THERE are many able thinkers who, following Kant, consider a causal determination to be the *sine qua non* of a humanly recognizable sequence of events. It is supposed that every element in any sequence of events that we are able to apprehend must follow from a preceding event "according to a necessary rule." Now, we believe that these thinkers are very close to the truth. But the Kantian argument is usually developed as it was by Kant himself, toward the assertion of a hard and fast determinism, a determinism so rigid that Kant despaired of reconciling it with any account of moral freedom and turned toward a new realm of supernatural character wherein man might be free, although seeming, by virtue of his participation in the world of sense experience, deprived of any spontaneity. This extreme formulation of the argument we consider ungrounded. It seems that the conclusion can be stated quite in harmony with the doctrine of creative contingency.

It is quite obvious that any experience of a sequence of events must possess a continuity of conformation, some order in terms of which one temporal element is related to another. This continuity provides a more or less abiding pattern through which we may recognize one event as "belonging" to another or following upon it as a continuation of the order inherent in the situation. This continuity can be supplied in one of two ways. Its temporal form may be subjective, or private, insofar as it is a matter of our perspective, i.e. in this case, conditioned by the fact that we are studying an unchanging situation, as for instance, surveying in a succession the details of a mansion. Or the element of continuity may be objective, as when we follow with our eyes the motion of a ship that is in motion against a background. Now, it is clear that in these two situations we must recognize different categories or primary forms of organization. We recognize that the gables, windows, etc., of the mansion are parts of its structure. Thus we find an objective order in the object studied. When we follow the motion of the ship, we must realize that the various positions noted are related to one another objectively as moments of the ship's motion. This, unlike the house, cannot

be conceived as remaining stable throughout a time-span. For in the case of the ship's motion, the order of succession in our apprehension does not depend upon our way of approach, as it did in the case of the mansion. Rather the successive character is objective and belongs to the motion itself.

It is obviously reasonable to express this fact of objective sequence by stating that every element in an objectively successive situation must follow upon another according to a rule. Here the rule or group of rules underlying the motion supply the system of organization which in our former illustration was supplied by the presence of the house. In the case of the ship's motion the system is guaranteed by the fact that the positions of the ship occur as they do owing to a causal principle. Causality, we are told, is the principle of such temporal organization, in terms of which we may distinguish between subjectively and objectively ordered succession.<sup>1</sup>

And this is, in part, a valid expression of the case. But it is ambiguous when studied from the point of view of creative process. For the question arises: Is the exact relation between an earlier moment of succession and a later fixed and subsistent prior to the latter moment's becoming actual? If it is, we are dealing with inert system and one moment may be said to follow upon another according to a rule which might be discovered before the latter event took place. Thus a complete determinism would be established in the realm of all possible objectivity. If, however, the precise pattern of the relation comes into being only with the production of the later event, the whole situation may be plastic and possibly belong to a creative process as we have suggested in these pages.

Thus the ground of the pattern of continuity to be recognized in change may be interpreted as the pattern of the structural universals embodied in the process. Here we have the fact of coherent order embracing the concrete as it develops, yet not dominating its course. This fits the requirements of the recognition of causality, for the presence of structural universals gives us ground for the recognition of more or less stable, although gradually changing objects. Without this stable background of continuity, we would be unable to distinguish the events as successive when they are objectively considered.

Causality may then be summarily described as follows. Every moment of process, or change, introduces an element of novelty. But there is no absolute and complete novelty in any moment of change. The new

<sup>1</sup> *Critique of Pure Reason, Second Analogy of Experience.*

"belongs to" the old owing to the fact that there is a background of structure common to both of them. This structure may be described as the embodiment of causal principles. This common background is the element of conformation between old and new, without it novelty cannot be manifest as novel. Without this background change as we know it would be impossible. *There would be nothing to change.*

Another fundamental objection to the philosophy of creation is to be found in the writings of the modern idealists. A statement of their point of view occurs in Bernard Bosanquet's Chapter 7 + 5 = 12, in his book *The Meeting of the Extremes in Contemporary Philosophy*. Bosanquet admits novelty into world-structure, but he will not admit the reality of temporal development. Novelty is of a logical rather than of processional nature. Every truth is an eternal novelty. Insofar as it is significantly true rather than tautologous it contains something unique and proper to itself, yet it is none the less bound together with its ground and systematic with its logical environment. But this logical ground cannot as a whole process be described as temporal. To speak of unfinished development in the world as a whole, or of the contingent development of that world is to violate its systematic nature. Truth does not recede or advance and the world is eternally a single systematic structure. Bosanquet's argument follows:

"7 + 5 = 12. I take for consideration this simplest case, in which, as I believe, the whole decision upon the ultimate reality of time and progress can be shown to be contained in principle.

"We start from elementary logic. If 12 were not the same as seven plus five, the judgment would not be true. If it were not different, the judgment would not be a judgment. There is no province of knowledge over which the law of identity, construed as the principle of tautology, bears sway. There is no region of reality which can be interpreted by its aid.

"What you have in this simplest example, then, is an *eternal novelty*. It is the expression of something which, parting from itself, remains within itself, and which being always old, is yet perennially new. To consider the expression impartially is to recognize in the simplest thought this inherent connection. Here we have the open secret, from which a hasty and one-sided philosophy runs away. It applies its 'either . . . or' where they deny the foundations of reality.

"So when we find a doctrine that judges of ultimate reality on the basis that if novelty, progress, difference are to be achieved, the iden-



tity of the whole as a whole and in its ultimate character must be abandoned, we know where we are. We are simply in the presence of a blunder of elementary logic. We are confronted by the belief that a whole complex, to affirm itself in something new, must, as a whole, depart from and recede from something that it already was."<sup>2</sup>

Our answer is a simple one. Bosanquet has, despite his mention of his "simplest example," drawn his conclusion from evidence of a very special sort. He has presented us with an arithmetical truth. What he says concerning this truth and the logic involved is undeniable. But his statements have no application to the core of a philosophy of creation. Bosanquet is thinking of the recognition of an eternal fact for which expression is a simple matter, once a system of notation has been elaborated. The philosophy of creation does not recognize here anything similar to a microcosm from which final conclusions concerning the nature of reality may be successfully derived. The power which enlivens the world is not sheerly cognitive, much less calculative. Creative process is the embodiment of value in structure. It finds its microcosm in concentrated esthetic expression or creation rather than in arithmetical calculation.

Mathematical calculation may reveal (through relating material elements one to another) the ratios present in embodied or abstract structural universals. But by no means does it give us a notion of cosmic creation. To be sure, from a logical point of view moments of past creation do possess an eternal novelty of this sort, and this novelty is recognized as long as they are retained for employment. But they are eternal novelty which in full context no longer satisfies divine insight. The actual creative life of process is also "eternally novel" but the novelty is eternally a new creation with a novel history, rather than the logical novelty of which Bosanquet speaks.

The fact that there is always novelty in creation is, on our view, an eternal truth. This means that it is a true judgment concerning reality. Reality itself may contain true judgment but the world is in the last analysis sustained by esthetic embodiment of value. All truth is logically consistent with other truth. But there is no reason why the principle of the system of consistency cannot be that of creative process. Bosanquet would imply that the principles of the system must be the formal principles of logical validity. But to claim that the object of true judgment must have for its primary principles the very logical principles which,

<sup>2</sup> From Bosanquet's *The Meeting of Extremes*, p. 103. By permission of The Macmillan Company, publishers.

when present in the thinker's procedure, render judgment true is to commit a subjectivist fallacy.

Now, if the first principle of the system of reality is that of creative process, an interesting result may be seen to follow. In one sense reality will not "depart from itself." This will be because reality will always conform to the principle of creative process: reality will always be contingently productive and telic in nature. But just because of this creative nature reality will always be "becoming" or "departing" from previous concrete embodiment, although to be sure at every moment the concrete will possess a coherent structure, rooted in the past.

There are thus three points to consider:

1. Reality possesses an eternal first principle, creative process.
2. In virtue of this principle, reality is always becoming.
3. This becoming is not chaotic, but contingent passage, always in the form of some unpredictable, coherent conformation with the past. The type of orderly coherence was made manifest in our treatment of Kant's doctrine of causality.

On these grounds we may disagree with Bosanquet. Reality, as a whole, does depart from itself. It is protean and always assuming new character. There is, however, a thread of continuous form enduring throughout change. This form is essential to creative process. It includes subordinate continuity to be found in the many patterns preserved in actual concretion, thus supplying the scientific investigator with ground for believing in a uniformity of nature.

Bergson himself would object to an argument such as Bosanquet's as follows. The doctrine that the world must be an eternal absolute springs from the fear of *nothing*. The eternal structure of the absolute is thought to preserve reality from chaos: If such structure does not dominate all existence what assurance have we that *nothing*, or radical confusion, will not break in upon us at any moment? According to this view, so opposed to Bergson's, reality can never "depart from itself," i.e. fail to rest with a completely actual structure, without inviting *nothing* to devour it. Thus real change and novelty cannot be admitted.

Now, Bergson feels that the great error in such thinking lies in the concept of *nothing* which it involves. When we argue in this way, we think of *nothing* as of something positive, as the fate, the catastrophic dissolution, which awaits the universe lacking in complete and "ready-made" structure. Now *nothing* is not such an entity. It is merely the apotheosis of disappointment. We never experience the entity *nothing* as a substantial object. Rather we fail to find what was expected and

ignore whatever structure we do actually encounter. Thus we say, "There is *nothing* here." From this point of view it is obvious that the negation of one type of order leads only to the recognition of another. His doctrine goes further when he adds that to remove one type of order is to establish another.

Thus to deny the presence of vital order is to recognize the presence of inert order and *vice versa*. Vital order degenerates into inert when concentration slackens and to remove inert order vital production is necessary. Hence the universe is safe from *nothing* and philosophers need not insist so urgently upon our raising intellectual bulwarks against its intrusion.

Now, Bergson's account of *nothing* is true enough insofar as that idea appears in practical life. Practically we have no concern with an absolute *nothing*. But does it necessarily follow that, when we think of absolute *nothing* as the opposite of actuality in general, we do no more than misapply the practical *nothing*? It is certainly not at all obvious that reflective thought must draw all its concepts from practical life. Thought has an autonomous realm of its own.

Now, the formidable rôle played by *nothing* in western philosophy has owed its power to what we have above described as the notion of logical stability and to the feeling of utter bewilderment which its violation produces in our minds. It is, then, not so much the feeling that without absolute order reality would resolve into chaos that motivates us as our conviction that order cannot arise out of disorder. It is the very thought which brought Aristotle to maintain that actuality is prior to potentiality. Since this is so, we are careful, even when defending the ultimate reality of change, to avoid the assertion that the universe "departs from itself" in the unqualified meaning of that expression.

### 3

The philosophy of Josiah Royce lies sufficiently close to the philosophy of creation to require discussion in this connection. In fact, his theory of time and eternity offers a challenge to the theories which we have so far outlined. Royce's philosophy is difficult to classify. He is an idealist and as such owes much to the German romantic thinkers. But eager to "save the appearances" of ethical life, he sought to distinguish the individual from the universal and to grant autonomy to every finite consciousness. His attempt to do this approaches the doctrine of creation. Indeed, it is significant that Gentile's follower, Ruggiero, finds Royce one of the "very few thinkers who open out new roads to thought."<sup>a</sup>

<sup>a</sup> From Ruggiero's *Modern Philosophy*, p. 290. By permission of The Macmillan Company, publishers.

According to Ruggiero, Royce succeeds "in grasping the supremely concrete character of the act of knowledge, as individuality which concentrates in itself the universality of experience." Thus the "essence of the object of thought is not the mere possibility of experience, it is the existential act of thought itself, insofar as this act summarizes from its individual point of view the whole of reality; and consequently the existence of my object depends on the essence of the object itself insofar as this essence is expressed in my individual act of knowledge."

Truly, Ruggiero has captured the secret of Royce's philosophy. Thought, according to Royce, is the embodiment of meaning in "concrete imagery" and this act of embodiment is the fundamental and ultimate process of reality. This doctrine very nearly makes a philosophy of creation of Royce's thought. As we shall see, Royce deviates from the philosophy of creation when framing his theory of time and eternity. Even here we shall find that Royce is moving away from orthodox idealism toward a more modern doctrine.

Every finite idea has for Royce an internal and an external meaning. Meaning is internal insofar as the purpose of the thinker is embodied in the texture of the thought. It is external insofar as the thinking contains elements which the thinker's purpose must "take for granted." Ideas refer to reality that stand over and against the content of our purposes. This is the external meaning.

Royce employs a subtle and elaborate dialectic to show that even this external meaning must ultimately appear as the embodiment of purpose, even of our own purpose in its true, ideal form.

"Being is something other than themselves which finite ideas seek. They seek Being as that which, if at present known, would end their doubts. Now, Being is not something independent of finite ideas, nor yet a merely immediate fact that quenches them."<sup>4</sup> It is, Royce insists, the fulfilment of the idea. Since the doctrine of *Mögliche Erfahrung*, if taken as final, puts potentiality prior to actuality, an impossible procedure, this fulfilment must exist as a real object. It must be more than a phenomenon valid for thought, but an object from which validity derives its meaning. The world is the final embodiment of my purpose, my idea. Royce has striven to prove that object cannot be related to thought in any other way. His argument does not possess the finality that he claims for it, for he has nowhere really shown that the alternatives which he considers are the only ones.

<sup>4</sup> From Royce's *The World and the Individual*. By permission of The Macmillan Company, publishers.

All being then, says Royce, is realized, embodied meaning or—what is the same thing—realized purpose. Disembodied meaning is never real, for reality cannot be reduced to sheer possibility.

Royce moves even nearer to our philosophy when he adds to this view of reality a theory of science. Science describes, art and religion appreciate. Science approaches the world as if it were only a series of events—in fact, Royce compares the tissue of events which the scientist studies to the series of real numbers. The student is anxious to increase the number of terms in the causal series. He wishes to discover terms “between” two given points or events. So science tacitly postulates that acknowledged facts are “*such that any pair of them could be known together through a single possible act of discrimination and comparison. Any pair of real objects are thus linked.*” To describe this linkage, Royce continues, “The only way that we have of proceeding towards a solution of this problem, so long as we are still ignorant in the concrete of what One Will is expressed in these objects, is by passing from the pair to the triad, and defining an object that lies *between* the members of the first pair.” A new postulate is forced upon us “*Between any two objects of the world there is always another to be found.* Our power to illustrate this postulate in our empirical investigation is very wide but it is also limited. And the postulate itself would fail wholly to receive application beyond a certain definite point, if we could only come to understand all the objects of our world as a single ordered series of the type of the whole number-series. For then any pair of directly successive objects would have no object between them. But then, to be sure, the objects of the world if so understood, would no longer *need* to be discriminated merely in pairs. They would be logically given all at a stroke (like the whole numbers) as an expression of a single self-representative Purpose, and we should have to look no further than this purpose for the transparent definition of our facts.”<sup>5</sup>

Recognition of intermediate elements is of two sorts. Elements may be recognized in temporal order, following upon one another with further elements between them.

On the other hand, the intermediate elements may be ordered logically, one class of objects being described as “between” two other classes when it includes all the objects that are common to the two classes, *A* and *B*, and is included within the class of objects which are either *A* or *B*. According to such a scheme, classes may be included between

<sup>5</sup> *The World and the Individual*, series two, New York, 1901, pp. 87-8.

classes indefinitely, and schemes of descriptive classifications mapped out.

It is Royce's belief that the continuity of possible events and classes here envisaged is not a characteristic of the ultimate world. If the self and the will are real and final, the universe must be a well ordered system: it must be composed of discrete elements in an ordered series. Thus Royce avoids the necessity of describing the human mind as envisaging a continuum of means and ends when it achieves an event in the concrete. To be sure, disinterested descriptive contemplation of the act might reveal an indefinite linkage of elements between any two points. But the student thus interested only in the world of description misses the telic limits and boundaries, the *real* formations of things. He fails to see the embodiment of meaning. His interest is limited to transeunt or efficient causes on one hand and to schemes of classification on the other.\*

All cosmic embodiment is, for Royce, unique in the sense that *this* particular nexus of concretion and only *this* satisfies the purpose involved. Of course, in our own lives we find that our choices rarely center upon unique objects. But this is owing to our finitude which withholds us from recognizing true individuality in its concrete embodiment. But for absolute experience, individuality is manifest in embodied entities. Hence no center of embodiment is ever merely an instance of a law. For instance, every personality is unique and precious as a unique embodiment of divine purpose or meaning. God says of each creature "I will have no other"—no real repetition.

Unfortunately Royce, close as he is to the philosophy of creation, does not introduce the concept of art as an analogy to illustrate this situation. He does not compare this love of unique creatures with the satisfaction of the artist who realizes a unique effect in each of his works. On the contrary, we soon find Royce talking once more about—the number series! He maintains that the set of prime numbers, or of odd or of even numbers satisfy—in a measure—the requirements of individuality, possessing a unique character which must be *discovered* and recognized even as empirical. Royce points as an example to the determination of the prime numbers which, he thinks, reveals the unique disposition of pure order. Now, it is true that numerical order in the case of the prime numbers is, apparently, not a function of something else. But, even so, a set of numbers is hardly the embodiment of purpose—at least we fail to grasp any such purpose in the numbers (of

\* *ibid.*, Lecture II.

course a system of notation is a telic achievement). Hence the unique haecceity of a set of numbers is not relevant to Royce's argument.

But we need not make too much of a criticism which, if valid, strikes home only at an unfortunate choice of example.

Owing to the nature of individuality, Royce insists that complete foresight is impossible (here the example of the prime numbers is not wholly irrelevant). Thus Royce makes a point that is, as we have learned, central to the philosophy of creation. Only "common natures" are foreseeable since these are the only natures which can be shared by more than one individual. Thus, to follow Royce's example, prime numbers share the common nature of oddness, and this character does not determine their full uniqueness, which cannot be computed by any formula or combination of classes.

But Royce draws away from the creationist position when he discusses the nature of time and its relation to eternity. This he does, even though he admits the serial nature of time is absolutely real, for although Royce does not argue, with Bradley, that the temporal scheme of things is appearance as opposed to reality, he removes time's genuinely temporal character by asserting that the whole time order is apprehended in the absolute as a *totum simul*. This position he defends with subtlety and insight, despite the fact that he is ultimately unsuccessful.

Time, he argues, although a matter of before and after, exists none the less all at once. This position his thoroughly idealistic cast of mind allows him to approach through a psychological analysis of the consciousness of time. Like Bergson's duration, time cannot be reduced to the instantaneous. To do this would be to strip events of their essential relation with the past. Any event, small at will, is internally ordered according to the dimension of before and after. But it may be apprehended all at once—as for instance a musical melody or a verbal phrase. Such an entity may be present to a single span of attention. The world is the object of God's attention, temporally ordered and eternally present.<sup>7</sup> The difference between our view of things and God's is one of span of attention. God's is all inclusive.

But Royce's analysis of the conscious time-span is not complete. It is not as astute as that achieved by his colleague William James. James saw the truth of the time-span but he insisted upon another element which Royce seems to have ignored. This we may call temporal emphasis.

<sup>7</sup> *The World and the Individual*, series two, Lecture III.

"The pack of cards is on the table" may be all at once in my mind. When I pronounce "pack" or "cards," "table" is already an element of expectation. And when I pronounce "table," "pack of cards" still is present as the relevant topic. But none the less, emphasis does pass from one element to another. Now one element enjoys the emphasis of full presentational immediacy, now another. Both these elements blend into one object which for a longer *now* enjoys immediacy. But this *now* is full of moving emphasis.

Furthermore, the "boundaries" of the span are changing, as new elements are received and old ones lost beyond the fringe of any emphasis. If the boundaries did not actively open out into the future there would be no moving emphasis. Thus finite consciousness is not a container of serial idea. Consciousness acts: it moves. Ideas melt into others. When a whole series is apprehended at once, there moves through it a temporal emphasis of attention. If this attention is alert and active, it may actually disappoint the element of expectancy. Certainly sudden changes of plan, such as those through which an alert driver avoids a collision, exemplify this.

Now, how is this process, this motion, which is a fundamental aspect of the world, contained in God's absolute experience? The series of before and after seen all at once contains no such changing emphasis. If it did, it would cease to be *all at once*. Now one element, now another would be emphasized. God may understand the path of change but he cannot perceive its real life. In the inclusive *totum simul*, the elements of the world-series may be apprehended, but not the *change* by which one becomes another. Thus Royce's absolute is a colossal over-simplification of the world, in that it does not really include the life of finite elements. Royce would have us believe that there is one *now*, complete and changeless, whereas the texture of things reveals *nows* melting into one another. As temporal emphasis shifts *nows* perish. These emphases and these perishings the absolute cannot include. Thus Royce's system splits in two, temporal falling away from eternal.

The outcome which most naturally suggests itself is the renunciation of the eternal span of attention and the recognition of temporal creation untrammelled by an existent future. Certainly, Royce's theory of embodiment of meaning is compatible with such a resolution.

#### 4

Other philosophers have maintained that the whole course of events is ultimately a *totum simul* and have then argued that this *totum simul* is compatible with indeterminism. Of these C. D. Broad is an outstand-



ing example.<sup>8</sup> An all-knowing God, they argue, may know the future as we know the past through memory. Thus we are not required to believe that even God may infer all events from a survey of their past. Now, such a *totum simul* as this, if it can finally be accepted in the form that its defenders publish, is probably not an unreasonable doctrine. It may well be quite compatible with a philosophy of human freedom. The difficulty lies not so much with the reasonableness of the theory as with its rationality. Such a theory escapes real monist determinism, for its parts are not bound together into a block reality, complete inferential foresight being impossible even for God. Thus the real force of Bergson's "*Tout est donné*" is avoided, and the dilemma of determinism does not apply. But the true difficulties are those of metaphysical description. How to relate actual, living change with temporal emphasis to an inclusive *totum simul* was Royce's problem. We have just seen wherein he failed.

However, it is not at all necessary to accept an existent, determinate history, past, present and future all together. We need not agree with Royce and Broad that our future has determinate, concrete structure. It seems quite significant to say that in just this respect the future is *not*. This doctrine is really a simple one: that the future does not exist is comprehensible enough to a free and open mind. But philosophers have shunned the theory, and thereby paid their semiconscious allegiance to the notion of logical stability, in this place clearly a usurper.

Nor is this doctrine contrary to the "laws of logic." It is quite conceivable that the law of excluded middle does not apply to the future as it does to the past and present which are both concretely determinate. Concerning possible future events, indicated as they must be by a combination of universal patterns, it is not always significant to state whether their prediction is true or false. It may well be that the middle course is not excluded: that the statement is neither true nor false, but that it awaits verification in the Jamesian sense of the word. The event *makes* the truth or falsehood of the proposition. Before the event such predicates could be applied only provisionally. Concrete events themselves are, according to the philosophy of creation, unknowable in their complete compresence of structure. They are the achievement of a creative act and only so are they fully present to mind. Concrete events, conceived in this fundamental aspect, are of course beyond prediction.

<sup>8</sup> See Broad's article "Time," in Hasting's *Encyclopedia of Religion and Ethics*.

Thus, as Mr. Hartshorne<sup>9</sup> has argued, the law of excluded middle is involved in the definition of the concrete, and its absence is essentially involved in the definition of the future. Thus we need not say that my future exists in a determinate *totum simul*. There may be much about my future which does not exist at all, and about which no statement can be made. Of course, there are many reaches of futurity which are fairly obviously relevant to patterns embodied in the past to which we have every reason to expect that this future will conform. Further we cannot go.

In fact, the future is a sort of *nothing*, *nothing* in the most important sense of the term, the sense which Plato attached to the unlimited (*apeiron*) in *Philebus*. Openness or the indeterminate is no (concrete) thing, and there are no things in the future, although there will be when it is the present. The above statement is subject to excluded middle, but it has nothing to do with the empirical texture of future concretion.

<sup>9</sup> C. Hartshorne, "Contingency and the New Era in Metaphysics," *The Journal of Philosophy*, Vol. XXIX (1932), nos. 16 and 17.



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